NOI

LIST OF LIGHTS

ON THE

NORTHERN LAKE AND RIVER COASTS

OF THE

UNITED STATES,

CORRECTED TO JANUARY, 1873;

AND ALSO OF

THE CANADIAN LIGHTS

ON THE

NORTHERN SHORES OF THOSE WATERS.

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Cape Vince
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Detroit, Mic
Duluth, Min
Dunkirk, Ne
Erie, Pennsy
Grand Have

LIGHT-HOUSE BOARD OF THE UNITED STATES.

(Organized in conformity to the act of Congress approved August 31, 1852.)

LIST OF MEMBERS.

Hon. GEORGE S. BOUTWELL, *Secretary of the Treasury, ex officio President.*
Professor JOSEPH HENRY, LL.D., *Secretary Smithsonian Institution.*
Brevet Major General A. A. HUMPHREYS, *Chief of Engineers, U. S. Army.*
Brevet Major General J. G. BARNARD, *Colonel of Engineers, U. S. Army.*
Professor B. PEIRCE, LL.D., *Superintendent Coast Survey.*
Rear-Admiral T. BAILEY, *U. S. Navy.*
Rear-Admiral HENRY WALKE, *U. S. Navy.*
Rear-Admiral C. S. BOGGS, *U. S. Navy.*
Major GEORGE H. ELLIOT, *Corps of Engineers, U. S. Army.*

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Major GEORGE H. ELLIOT, *Corps of Engineers, U. S. Army, Engineer Secretary.*

LIST OF LIGHT-HOUSE DISTRICTS AND LOCAL OFFICERS.

Districts.	Limits of Districts.	Inspectors.	Headquarters.	Engineers.	Headquarters.
3d.	Extends from Gooseberry point, Massachusetts, to include Squam inlet, New Jersey, and embraces all the aids to navigation on the sea and sound coasts of Rhode Island, Connecticut, and New York; Narragansett and New York bays; the rivers Providence and Hudson, Whitehall Narrows, and Lake Champlain.	James H. Strong, Commodore, United States Navy.	New York City.	Brevet Brigadier General I. C. Woodruff, Lieutenant Colonel of Engineers, United States Army.	Tompkinsville, Staten Island, N. Y.
10th.	Extends from the mouth of Saint Regis river, New York, to include Grassy Island light-house, Detroit River, Michigan, and embraces all the aids to navigation on the American shores of Lake Erie, Lake Ontario, and river Saint Lawrence.	N. Collins, Commodore, United States Navy.	Buffalo, N. Y...	Brevet Lieutenant Colonel George L. Gillespie, Captain of Engineers, United States Army.	Buffalo, N. Y.
11th.	Embraces all aids to navigation on the northern and northwestern lakes above Grassy Island light-house, Detroit River, and includes lakes Saint Clair, Huron, Michigan, and Superior.	Alex. Murray, Commodore, United States Navy.	Detroit, Mich..	Brevet Brigadier General O. M. Poe, Major of Engineers, United States Army.	Detroit, Mich.

LIST OF COLLECTORS OF CUSTOMS ACTING AS SUPERINTENDENTS OF LAKE LIGHTS.

Post Office Address.	Names.	Post Office Address.	Names.
Buffalo, New York	R. W. Daniels	Marquette, Michigan	Hiram A. Burt.
Burlington, Vermont	William Wells	Milwaukee, Wisconsin	Geo. C. Stevens.
Cape Vincent, New York	Sidney Cooper	Ogdensburg, New York	S. P. Remington.
Chicago, Illinois	Norman B. Judd	Oswego, New York	Elias Root.
Cleveland, Ohio	P. G. Watmough	Plattsburg, New York	Jacob Parmerter.
Detroit, Michigan	George Jerome	Port Huron, Michigan	John P. Sanborn.
Duluth, Minnesota	Henry Selby	Rochester, New York	John M. Davy.
Dunkirk, New York	Pascal P. Kidder	Sandusky, Ohio	John Youngs.
Erie, Pennsylvania	Richard F. Gaggin	Suspension Bridge, New York	T. E. Ellsworth.
Grand Haven, Michigan	H. C. Akeley	Toledo, Ohio	P. S. Slevin.

TO MARINERS.

TREASURY DEPARTMENT,
OFFICE LIGHT-HOUSE BOARD, *Washington City, January*, 1873.

Mariners and others interested in commerce and the preservation of life and property from loss by shipwreck on the coasts of the United States, are earnestly requested to give prompt information to the Inspectors, or Superintendents of Lights, or, by direct communication to the Light-House Board, of cases in which lights are not lighted punctually at sunset and extinguished at sunrise, or in which they are not properly attended to during the night, or in which buoys are out of position, and of all cases in which the published instructions are not strictly complied with, that the Board may, with as little delay as possible, apply the proper remedy, and prevent neglect of duty on the part of persons connected with the lights, beacons, and buoys of the United States.

LIGHTS ON NORTHWESTERN LAKES.

TIME OF EXTINGUISHING IN THE WINTER AND RE-EXHIBITING THEM IN THE SPRING.

All lights of the United States in the River St. Lawrence, and on Lakes Ontario, Erie, St. Clair, Huron, Michigan, Champlain, and Superior, and their contiguous bays, &c., will be discontinued on the first day of January of each year, unless otherwise specially directed; and upon the opening of navigation in the localities above named in each year, the light-keepers of the respective lights will exhibit the lights from sunset to sunrise of each night, as soon as it is practicable for vessels to enter the ports at or near which the lights are situated. The keepers of lights situated on islands on the Lakes will be governed, in exhibiting their lights on the opening of navigation in the spring of each year, by the action of the keepers on the main land.

Light keepers will be careful to note on their journals, and quarterly returns, the day on which their lights are exhibited upon the opening of navigation in the spring, and to conform strictly to the terms of the foregoing notice.

REMOVING BUOYS IN THE FALL AND RESTORING THEM IN THE SPRING.

The buoys on the Lakes and adjacent navigable waters will be removed each year upon the closing of the navigation of the respective localities, and replaced in the spring as soon as the ice will permit.

AN ACT FOR THE PROTECTION OF BUOYS IN THE NIAGARA RIVER—PASSED APRIL 4, 1871.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Any person mooring any vessel, scow, or raft to any buoy placed by the United States in the Niagara River, or who shall in any manner make fast thereto any vessel, scow, or raft, shall be liable to a penalty of fifty dollars for each and every offense.

SEC. 2. Any person who shall remove or destroy any such buoy, by accident or otherwise, and shall not report such removal or accident to the collector of the port next entered after such removal or destruction, shall be liable to a penalty of one hundred dollars for each and every offense.

SEC. 3. Said penalties may be recovered by complaint before any court competent to try the same.

SEC. 4. In case penalties shall be collected for violation of this act, one-half shall be paid to the informer; the remainder of said penalties shall be paid to the collector of the port of Buffalo, to be used in maintaining and restoring said buoys.

SEC. 5. The collector of the port of Buffalo is hereby authorized to sue for and collect the penalties mentioned in this act.

SEC. 6. This act shall take effect immediately.

AN ACT FOR THE PROTECTION OF BUOYS IN THE STATE OF MICHIGAN.

SECTION 1. *The People of the State of Michigan enact*, That any person mooring any vessel to any of the buoys or beacons placed in any of the waters of the State by the authority of the United States Light-House Board, or in any manner hanging on with a boat or vessel to any such buoy or beacon, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punishable by a fine not exceeding fifty dollars, and imprisonment in the county jail not exceeding thirty days; and any person who shall willfully remove, or destroy, any such buoy or beacon, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punishable by a fine not exceeding two hundred and fifty dollars, nor less than fifty dollars, and imprisonment in the county jail not exceeding ninety days.

SEC. 2. It shall be the duty of the prosecuting attorney of the county in which such buoy or beacon shall be situated, to proceed, in the name of the people, against any person violating the preceding section of this act, when notified in writing of such violation by any officer of the United States light-house service.

Approved January 30, 1869.

NOTES AND REFERENCES.

The lights on the Northern Lakes are arranged in the order of location, commencing on Lake Champlain and proceeding westward.

The names of the lights are printed as follows, viz:

1. PRIMARY LAKE-COAST LIGHTS.
2. SECONDARY LAKE-COAST LIGHTS.
3. Harbor Lights.

In the column of "Distance visible, in statute miles," will be found the distances at which the lights can be seen, under ordinary states of the atmosphere, by observers at elevations of ten feet above lake level. The courses given are *true*, and must be corrected by masters of vessels for *magnetic variation*. The given courses, bearings, &c., of the lights on the British list, are magnetic.

REFERENCES.

F. W ..... Fixed or steady white light.
F. R ..... Fixed red light.
Flg. W..... Flashing white light.
Flg. R..... Flashing red light.
Flg. R. & W.. ... Flashing red and white light.
F. V. W. F..... Fixed white light, varied by white flashes.
F. V. R. F..... Fixed white light, varied by red flashes.
F. V. R. & W. F.. Fixed white light, varied by red and white flashes.

Colored lights are specially noted by small CAPITALS in column of remarks.

[⊙ 1] First-order lens apparatus.
[⊙ 2] Second-order lens apparatus.
[⊙ 3] Third-order lens apparatus.
[⊙ 4] Fourth-order lens apparatus.
[⊙ 5] Fifth-order lens apparatus.
[⊙ 6] Sixth-order lens apparatus.

Light-house
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Light-house
Notes and R
Visibility of
Lights.....
Notice to Ma

Alpena Pulpit
Ashtabula, O

Barber's Poi
Bayley's Har
Beaver Islan
Beaver Islan
Benjamin's I
Big Sable, La
Big Sodus, N
Black River,
Bluff Point,
Bois Blanc, M
Buffalo, N. Y
Burlington, V
Black Lake,

Calumet, Lak
Cana Island,
Carey's Camp
Cedar Point,
Cedar Point I
Charity Islan
Chambers's I
Cheboygan, M
Chicago, Ill.
Chilson's Ben
Colchester Re
Cold Spring,
Cleveland, Oh
Cleveland Ho
Conneaut, Oh
Copper Harbo
Copper Harbo
Crossover Is
Crown Point,
Cumberland I

Detroit, Mich
Dunkirk, N. Y
Duluth, Lake

Eagle Bluff, G
Eagle Harbor,
Eagle River, M
Erie, Pa.....
Escanaba, Gre

Fair Haven, L
Fort Gratiot,

Galloo Island,
Genesee, N. Y
Gibraltar, Mic
Grand Island,

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LIGHT-STATIONS.

A.

Above Pulpit Point, Vt 8
Ashtabula, Ohio 12

B.

Barber's Point, Lake Champlain 8
Bayley's Harbor, Wis 22
Beaver Island Harbor, Lake Michigan 18
Beaver Island, Mich 18
Benjamin's Place, Vt 8
Big Sable, Lake Superior 26
Big Sodus, N. Y 10
Black River, Ohio 14
Bluff Point, Vt 8
Bois Blanc, Mich 18
Buffalo, N. Y 12
Burlington, Vt 8
Black Lake, (Holland,) Lake Michigan 20

C.

Calumet, Lake Michigan 22
Cana Island, Lake Michigan 22
Carey's Camp, Lake Champlain 8
Cedar Point, Ohio 14
Cedar Point Range, Lake Erie 14
Charity Island, Mich 16
Chambers's Island, Green Bay 24
Charlevoix, Mich 18
Chicago, Ill 22
Chilson's Bend, N. Y 8
Colchester Reef, Lake Champlain 8
Cold Spring, Whitehall Narrows 8
Cleveland, Ohio 12
Cleveland Beacon 14
Conneaut, Ohio 12
Copper Harbor, Mich 26
Copper Harbor Range, Mich 26
Crossover Island, N. Y 10
Crown Point, Lake Champlain 8
Cumberland Head, Lake Champlain 8

D

Detour, Mich 18
Dunkirk, N. Y 12
Duluth, Lake superior 28

E.

Eagle Bluff, Green Bay 24
Eagle Harbor, Mich 26
Eagle River, Mich 28
Erie, Pa 12
Escanaba, Green Bay 24

F.

Fair Haven, Lake Ontario 10
Fort Gratiot, Mich 16

G.

Galloo Island, N. Y 10
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Grand Island Harbor, Lake Superior 26
Grand Island Harbor Range, Lake Superior 26
Grande Pointe au Sable, Lake Michigan 20
Grand River, Ohio 12
Grand Haven, Mich 20
Grand River Beacon 12
Grand Traverse, Mich 20
Granite Island, Lake Superior 26
Grassy Island, Michigan 14
Grassy Island, Wis 24
Green Island, Ohio 14
Green Island, Green Bay 24
Grosse Point, Lake Michigan 22
Gull Rock, Lake Superior 26

H.

Head of two Channels, Whitehall Narrows 8
Holland, (Black Lake,) Lake Michigan 20
Horseshoe Reef, Lake Erie 12
Huron, Ohio 14
Huron Island, Lake Superior 26

I.

Isle La Motte, Vt 8

J.

Juniper Island, Vt 8

K.

Kalamazoo, Mich 20
Kenosha, Wis 22

L.

La Pointe, Lake Superior 28
Little Fort, Ill 22
Long Beach, N. Y 8
Lower end of two Channels, Whitehall Narrows 8
Lower end of four Channels 8

M.

Mamajuda, Mich 14
Manitou, Mich 26
Manistee, Lake Michigan 20
Manitowoc, Wis 22
Maple Bend, Whitehall Narrows 8
Marblehead, Ohio 14
Marquette, Mich 26
Maumee Inner Range, Lake Erie 14
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Michigan City, Wis 22
Michigan Island 28
Milwaukee, Wis 22
Milwaukee Pierhead, Wis 22
Minnesota Point, Lake Superior 28
Mission Point, Mich 20
Monroe, Mich 14
Muskegon, Mich 20

N.

Niagara Fort, N. Y 10
North Cut Beacon, Wis 22

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Ogdensburg, N. Y 10
Oak Orchard, Lake Ontario 10
Old Maid's Place, Vt 8
Ontonagon, Mich 28
Opposite Belden's Dock, Vt 8

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Opposite Chapman's Dock, Vt 8
Oswego, N. Y 10
Ottawa Point, Mich 16

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Petite Pointe au Sable, Mich 20
Pere Marquette, Mich 20
Presque Isle Harbor, Mich 16
Presque Isle, Pa 12
Presque Isle Bay, Lake Erie 12
Plattsburg, Lake Champlain 8
Point aux Barques, Mich 16
Point au Roche, Lake Champlain 8
Point Iroquois, Lake superior 24
Point Betsey, Lake Michigan 20
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Port du Mort, Mich 24
Port Washington, Wis 22
Portage River, Lake Superior 26
Portage River Range, Lake Superior 26
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Presque Isle, Mich 18
Presque Isle Range, Pa 12
Pulpit Point, N. Y 8

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Rock Island, N. Y 10
Root River, Wis 22
Raspberry Island, Lake Superior 28
Round Island, Lake Superior 24

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Sackett's Harbor, Lake Ontario 10
Sister Islands, St. Lawrence River 10
Saginaw Bay, Mich 16
Sandusky Bay Lights, Ohio 14
Sheboygan, Wis 22
Skilligallee, Mich 18
Southport, Wis 22
South Fox Island, Lake Michigan 20
South Manitou, Mich 20
South of Snoddy's Dock, Vt 8
South Haven, Lake Michigan 20
Spectacle Reef, Lake Huron 18
Split Rock, N. Y 8
Steam-Mill Point, N. Y 8
St. Clair Flats, Lake St. Clair 16
St. Clair Flats Canal, Lake St. Clair 16
St. Helena, Mich 18
St. Joseph's, Mich 20
Stony Point, N. Y 10
Sturgeon Point, Lake Huron 16
Sunken Rock, N. Y 10

T.

Tail Point, Wis 24
Tawas, Lake Huron 16
Thunder Bay, Mich 16
Tibbett's Point, St. Lawrence River 10
Turtle Island, Ohio 14

V.

Vermillion, Ohio 14

W.

Waugoshance, Mich 18
Waukegan, Lake Michigan 22
West Sister, Lake Erie 14
White Fish Point, Mich 26
White River, Mich 20
Windmill Point, Vt 8
Windmill Point, Mich 16

THIRD DISTRICT. NEW YORK AND VERMONT.

Number.		Name.	Location.	Latitude north.	Longitude west.	Fog-signal.	Description of light. (See page 5.)
				° ′ ″	° ′ ″		
454	WHITEHALL NARROWS.	Benjamin's Place, No. 1	Two miles from Whitehall, Dresden, N. Y.	43 35 00	73 23 40		F. W.
455		Carey's Camp, No. 2	Half a mile north of Benjamin's place	43 35 45	73 24 31		F. W.
456		Opposite Chapman's Dock, No. 3.	About four miles from Whitehall, Dresden, N. Y.	43 36 30	73 23 56		F. W.
457		South of Smobly's Dock, No. 4	One mile from No. 3	43 37 40	73 24 14		F. W.
458		Steam Mill Point, No. 5	Three-quarters of a mile north of No. 4, Dresden, N. Y.	43 38 10	73 24 48		F. W.
459		Long Reach, No. 6	Half a mile north of No. 5	43 38 30	73 24 30		F. W.
460		Head of Two Channels, No. 7	Half a mile north of No. 6, Dresden, N. Y.	43 39 00	73 24 31		F. W.
461		Maple Bend, No. 8	Three-quarters of a mile north of No. 7, Dresden, N. Y.	43 39 45	73 24 48		F. W.
462		Lower end of Two Channels, No. 9.	One-half of mile north of No. 8, Dresden, N. Y.	43 40 15	73 24 46		F. W
463		Cobl Spring, No. 10	One mile north of No. 8	43 41 15	73 24 14		
464		Chilson's Bend, No. 11	Half a mile north of No. 9	43 41 45	73 24 31		F. W.
465		Opposite Belden's Dock, No. 12.	Half a mile north of No. 11	43 42 15	73 23 04		F. W.
466		Above Pulpit Point, No. 13	One-half mile north of No. 12	43 42 45	73 23 02		F. W.
467		Pulpit Point, No. 14	One-fourth mile north of No. 12	43 43 00	73 23 40		
468		Lower end of Four Channels and Narrows, No. 15.	One and one-fourth mile north of No. 14	43 44 15	73 22 30		F. W.
469		Old Maid's Place, No. 16	Three-fourths of a mile north of No. 15	43 45 00	73 21 38		F. W.
470	LAKE CHAMPLAIN.	Crown Point	On Crown point, west side of Lake Champlain, N. Y.	44 00 00	73 28 17		F. W.
471		Barber's Point		44 11 00	73 25 23		
472		Split Rock	Near Essex, west side of Lake Champlain, N. Y.	44 12 00	73 18 00		F. W.
473		Juniper Island	On Juniper island, south side of entrance to Burlington harbor, Vt.	44 27 00	73 13 00	A bell struck by machinery, and a horn sounded at intervals of 5 minutes.	F. W.
474		Burlington Beacon	One on each end of Burlington breakwater, Vt.	44 29 00	73 14 52		F. W.
475		Burlington Beacon		44 28 50	73 14 52		F. W.
476		Colchester Reef	On Middle bunch, off Colchester point, Vt.	44 33 00	73 10 37		F. R.
477		Bluff Point	On Valcour island, N. Y.	44 35 04	73 25 37		
478		Plattsburg Beacon	One on each end of Plattsburg breakwater.	44 40 50	73 26 32		F. W.
479		Plattsburg Beacon		44 51 00			F. W.
480		Cumberland Head	Near Plattsburg, west side of Lake Champlain, N. Y.	44 42 00	73 20 00		F. W.
481		Point au Roche	On the shoe at Point au Roche, in Lake Champlain, N. Y.	44 47 53	73 20 11		F. W.
482		Isle la Motte	On north end of Isle la Motte, Vt.	44 55 00	73 19 02		F. W.
483		Windmill Point	On Windmill point, Vt., opposite Rouse's point, N. Y.	44 58 58	73 20 11		F. W.

NEW YORK AND VERMONT. THIRD DISTRICT.

Number.	Time between flashes.	Duration of flashes, in minutes.	Color of tower or mast.	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When built.	When rebuilt.	When relighted.	Compass range of visibility.	Remarks.
	m. s.										
154	.....	9	Black	.....	18	Lens lantern.	1856	1869	.....	N. by W'd to S.	Portable beacon.
155	.....	9	Red	.....	18	Lens lantern.	1856	1869	.....	N. by E'd to S.	Portable beacon.
156	.....	9	White stake	.....	15	Lens lantern.	1856	1869	.....	N. by W'd to S.	Portable beacon. To be built.
157	.....	9	White stake	.....	15	Lens lantern.	1856	1869	.....	N. by W'd to S.	Portable beacon. To be built.
158	.....	9	Red	.....	15	Lens lantern.	1856	1869	.....	N. by E'd to S.	Portable beacon.
159	.....	9	Red	.....	18	Lens lantern.	1856	1869	.....	N. by E'd to S.	Portable beacon.
160	.....	9	R. & B., H. S.	.....	18	Lens lantern.	1856	1869	.....	N. by W'd to S.	Portable beacon; three red and black horizontal bands; centre, black; upper and lower, red.
161	.....	9	Red	.....	18	Lens lantern.	1866	1869	.....	N. by E'd to S.	Portable beacon in the marshy "narrows" at the head of Lake Champlain.
162	.....	9	R. & B., H. S.	.....	18	Lens lantern.	1856	1869	.....	N. by W'd to S.	Portable beacon; three black and red horizontal bands; centre, red; upper and lower, black.
163	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Portable beacon. To be built.
164	.....	9	Red	.....	18	Lens lantern.	1856	1869	.....	N. by E'd to S.	Portable beacon.
165	.....	9	Black	.....	18	Lens lantern.	1856	1869	.....	N. by W'd to S.	Portable beacon.
166	.....	9	Black	.....	18	Lens lantern.	1856	1869	.....	N. by W'd to S.	Portable beacon.
167	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Portable beacon. To be built.
168	.....	9	Black	.....	18	Lens lantern.	1856	1869	.....	N. by E'd to S.	Portable beacon.
169	.....	9	Red	.....	18	Lens lantern.	1869	.....	.....	N. by W'd to S.	Portable beacon.
170	.....	15	Dark blue	55	85	[◎ 5]	1858	.....	.....	NW. by E'd to S.	Tower of limestone, with keeper's dwelling of wood, connected by a covered way.
171	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. by E'd to S.	Building.
172	.....	17	Dark blue	52	100	[◎ 4]	1858	1867	.....	NW. by E'd to S.	Tower of limestone, with keeper's dwelling of wood, connected by a covered way.
173	.....	17	White	30	.....	[◎ 4]	1846	.....	1856	Entire horizon	Iron tower, painted white.
174	.....	10	White	21	.....	[◎ 6]	1867	.....	.....	Entire horizon	Two wooden beacons on breakwater.
175	.....	10	.....	21	.....	[◎ 6]	.....	.....	.....	Entire horizon	
176	.....	13	Yellow	51	.....	[◎ 5]	1871	.....	.....	E. NE. by S'd to E. SE.	On Middle bunch. Black lantern surmounts the tower, connected with the dwelling, which is one story, with Mansard roof. The light-house may be passed on either side, but it is recommended that it be passed by the westward channel, at a distance of at least 200 feet. Juniper Island light-house bears SE. by S., distant 4¼ nautical miles.
177	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	To be built.
178	.....	10	White	.....	32	[◎ 6]	1867	.....	.....	Entire horizon	Two wooden beacons on breakwater.
179	.....	10	.....	.....	32	[◎ 6]	.....	.....	.....	Entire horizon	
180	.....	14	Dark blue	36	55	[◎ 4]	1867	1867	.....	NE. by N. by E'd to W.	A tower and keeper's dwelling of limestone, connected by a covered way.
181	.....	14	Grey	50	54	[◎ 6]	1858	.....	.....	N. by W. by E'd to S. by W.	A tower of limestone; keeper's dwelling of wood.
182	.....	12	Dark blue	18	30	[◎ 6]	1857	.....	.....	N. by E. by W'd to S. by W.	A tower of limestone, with large lens. Lantern on top.
183	.....	13	Dark blue	40	52	[◎ 6]	1858	.....	.....	N. by W'd to S. by E.	Tower and dwelling of limestone.

TENTH DISTRICT. NEW YORK AND VERMONT.

Number.		Name.	Location.	Latitude north.	Longitude west.	Fog-signal.	Description of light. (See page 5.)
				° ′ ″	° ′ ″		
484	St. Lawrence River	Ogdensburg	Near the mouth of the Oswegatchie river, in St. Lawrence river	44 45 00	75 30 10		F. W.
485	St. Lawrence River	Crossover Island	On Crossover Island, St. Lawrence river				F. W.
486	St. Lawrence River	Sister Islands	On Sister Islands, St. Lawrence river				F. W.
487	St. Lawrence River	Sunken Rock	On Bush or Sunken Rock Island, in St. Lawrence river.				F. W.
488	St. Lawrence River	Rock Island	In Lawrence river				F. W.
489	St. Lawrence River	TIBBETT'S POINT	On the southeast side of the entrance to St. Lawrence river	44 09 00	76 22 00		F. W.
490	Lake Ontario	GALLOO ISLAND	On the west point of Galloo Island, N. Y.	43 51 00	76 26 30		F. W.
491	Lake Ontario	Sackett's Harbor	On the west end of Horse island, and west of Sackett's Harbor, N. Y.	43 56 30	76 08 10		F. W.
492	Lake Ontario	STONY POINT	On Stony point, N. Y.	43 51 00	76 18 00		F. V. W. F.
493	Lake Ontario	Oswego	On west pier, at the entrance to Oswego harbor, N. Y.	43 28 00	76 30 00		F. W.
494	Lake Ontario	OSWEGO PIERHEAD	Near the end of west pier, at the entrance to Oswego harbor, N. Y.				F. W.
495	Lake Ontario	FAIR HAVEN	Near the north end of west pier, at the entrance to Little Sodus bay, N. Y.	43 21 00	76 59 00		F. W.
496	Lake Ontario	Big Sodus Beacon, front	On crib at head of west pier, at the entrance to Big Sodus bay, N. Y.				F. W.
497	Lake Ontario	Big Sodus Beacon, rear	On inner end of west pier				F. W.
498	Lake Ontario	BIG SODUS BAY	At Sodus point, west side of Sodus harbor, N. Y.	43 17 00	77 00 00		F. V. W. F.
499	Lake Ontario	GENESEE	West side of entrance to Genesee river, N. Y.	43 15 30	77 36 00		F. W.
500	Lake Ontario	Genesee Beacon	On end of west pier, at entrance to Genesee river, N. Y.	43 16 00	77 35 00		F. W.
501	Lake Ontario	Oak Orchard	Near north end of west pier, at entrance to Oak Orchard creek, N. Y.				F. W.
502	Lake Ontario	NIAGARA FOR	At the junction of Niagara river and Lake Ontario, N. Y., on light-house lot, 1,050 feet southeast of mess-house in Fort Niagara.	43 15 00	76 03 00		F. W.

NEW YORK AND VERMONT. TENTH DISTRICT.

Description of light. (See page 5.)	No.	Latitude N.	Longitude W. from Greenwich.	Distance of light from shore in miles.	Color of tower or vessel.	Height of tower from base to focal plane of lens.	Height of lens above sea level.	Number of lens.	When built.	When rebuilt.	When altered.	Compass range of visibility.	Remarks.
F. W.	184			12¼	Grey	40	42	[⊙ 4]	1831	1870		S. by E.½ E. to W. by N. ½ N.	River light. Tower, with dwelling attached, built of limestone, on a low island on south side of channel N. by W. of the mouth of the river. A shoal extends out northerly from the island.
F. W.	185			12	White	25	27	[⊙ 4]	1847		1855	E. by S. ½ S. to N'd to S. by W.	River light. Light shown from tower on keeper's dwelling. Dwelling of brick; front and rear natural color; gables sheathed with boards and painted white. Cross over island is on the north side of the channel, and is 20 miles SW. from Ogdensburg.
F. W.	186			14	Grey	40	43	[⊙ 4]	1870			Entire horizon	River light. On the lower of the Three Sister islands. Tower rises from keeper's dwelling, both built of limestone; bears from Alexandria bay NE., distant about 7 miles. The islands are on the south side of the channel.
F. W.	187			11	White	28	31	[⊙ 6]	1847		1855	E. by S. by N'd to S. SW.	River light. Brick beacon, with an exterior sheathing of shingles, whitewashed, on pier of protection on Bush island or shoal, one-fourth mile north of Alexandria bay. Shoal is on north side of channel.
F. W.	188			12¼	White	27	39	[⊙ 6]	1847		1855	E. by S. by N'd to SW. by S.	River light. Keeper's dwelling of brick, with light on top. Bears from Alexandria bay S. by W., distant about 7 miles. Rock island is on the south side of channel.
F. W.	189			15	White	47	67	[⊙ 4]	1827	1854		NE. ¼ E. by N'd to S. SW. ¼ W.	Lake-coast and river light. Brick dwelling, connected with brick tower by covered way, both whitewashed. Galloo island, S. by W., 19 miles; Charity island, or shoal, SW. by W., distant 8 miles; Pigeon island, (English light,) W. ¼ S., distant 10 miles.
F. W.	190			14	Grey	55	62	[⊙ 4]	1829	1866		NE. by N'd and W'd to E.	Lake-coast light. Tower and dwelling of limestone, connected by covered way. A shoal lies N. by W., distant 1 mile, and marked by a buoy.
F. W.	191			13	Red	40	49	[⊙ 5]	1831	1870		E. NE. by N'd to S.	Harbor light. Dwelling, with tower attached, of brick. The island (which contains about 27 acres) is on the south side of entrance to harbor, 1¼ miles west of Sackett's Harbor, and is connected with the main land by a narrow spit, visible at low water.
F. V. W. F.	192	2.00		13	Grey	40	45	[⊙ 5]	1837	1869		S. SW. by W'd to NE.	Lake-coast light. Tower and dwelling attached; limestone; shore rocky and dangerous, and can only be approached in small boats in smooth weather. Oswego light, S. by W., 35 miles.
F. W.	193			15	Grey	66	72	[⊙ 3]	1837	18[illegible]			Lake-coast and harbor light. Keeper's dwelling ashore; frame; tower and oil-room attached, of limestone, painted white, on west pier of entrance, five hundred (500) feet from pierhead.
F. W.	194			10	White	15	22	[⊙ 6]	1872			S. by E. ¼ E. by E'd to W. by S. ¼ S.	Pierhead marked by a small light in a frame beacon, painted white; elevated walk connects tower and beacon.
F. W.	195			11¼	White	27	32	[⊙ 4]	1872			S. by W. ¼ W. by E'd to W. ¼ N.	Lake-coast and harbor light. Near the end of west pier, at entrance to Little Sodus bay, N. Y. Frame tower, painted white. No dwelling.
F. W.	196			12	White	27	34	[⊙ 6]	1858	1870		Entire horizon	Harbor lights, forming range, placed on opposite ends of west pier. Small frame towers on the west pier of the entrance. Range for entering the harbor and to keep clear of the west pierhead. Outer beacon illuminates the entire horizon. An elevated walk connects the two towers.
F. W.	197			10¼	White	18	24	[⊙ 6]	1858	1870		SW. by S. ¼ S. by E'd to NW. by W. ¼ W.	
F. V. W. F.	198	2.00		15	Grey	45	68	[⊙ 4]	1825	1870		E. ¼ N. by N'd to W. ¼ S.	Lake-coast and harbor light. Dwelling two stories high, with tower attached, dark grey limestone, situated on bluff 1 mile west of entrance piers to Big Sodus bay.
F. W.	199			15¼	White	44	75	[⊙ 4]	1822	1858		E. by N. ¼ N. by N'd to NW. by N. ½ N.	Lake-coast and harbor light. Tower of rubble masonry, whitewashed, with keeper's dwelling of brick connected by covered way, natural color, situated on bluff on west side of Genesee river, on the inside of piers of entrance.
F. W.	200			11	White	23	28	[⊙ 6]	1822		1855	SE. by E. by E'd and N'd to SW. ¾ S.	Harbor light. Frame beacon, painted *black* below and *white* above, on the pierhead of west pier.
F. W.	201			11¼	White	27	31	[⊙ 4]	1871			SE. ¼ E. by E'd to SW. ½ S.	Harbor light. Frame beacon, painted white, near pierhead of west pier; keeper's dwelling ashore, frame, and painted fawn color.
F. W.	202			16	Grey	49	78	[⊙ 4]	1872			E. ½ S. by N'd to S. by E. ¼ E.	Lake-coast and harbor light. Tower and oil-room attached, of dark limestone, placed on light-house lot, near the bank of the river, and 1,050 feet southeast of the old light on mess-house inside of Fort Niagara; keeper's dwelling detached, of rubble stone, whitewashed.

NEW YORK AND VERMONT.

Number		Name.	Location.	Latitude north.	Longitude west.	Fog-signal.	Description of light (see page 5.)
				° ′ ″	° ′ ″		
603	Lake Erie	Horseshoe Reef	On Horseshoe reef, at the entrance to Niagara river.				F. V. W. F
604		Buffalo Breakwater, (north end.)	On pier of protection at north end of breakwater in the harbor of Buffalo, N. Y.	42 53 00	78 56 00	A bell, struck 3 times in quick succession, at intervals of 30 seconds.	F. R
605		Buffalo Breakwater, (south end.)					
606		BUFFALO	Near the end of south pierhead, at junction of Buffalo creek and Lake Erie, N. Y.	42 53 00	78 56 00	A bell struck at intervals of 74 seconds.	F. W.
607		DUNKIRK	At Dunkirk, on the southeast shore of Lake Erie, N. Y.	42 29 45	79 22 20		F. V. W. F
608		Dunkirk, Pier on	On pier west side of entrance to Dunkirk harbor, N. Y	42 30 00	79 21 52		F. W.

PENNSYLVANIA AND OHIO.

Number		Name.	Location.	Latitude north.	Longitude west.	Fog-signal.	Description of light (see page 5.)
509	Lake Erie	ERIE HARBOR	South shore of Lake Erie; marks the approach to eastern entrance to Presque Isle bay, and about 1 mile to the northward and eastward of Erie, Pa	42 08 43	80 04 16		F. W.
510		Presque Isle Beacon Range, No. 1.	Behind north pier, on the north side of entrance to Presque Isle bay, Erie, Pa.	42 09 17	80 05 08		F. W.
511		Presque Isle Beacon Range, No. 2	On west end of north pier				F. W.
512		Presque Isle Beacon Range, No. 3	On east end of north pier				F. W.
513		Peninsula Beacon Range, No. 1.	On the peninsula, northwest of north pier.				F. W.
514		Peninsula Beacon Range, No. 2.					F. W.
515		Presque Isle	On north shore of peninsula, Erie harbor, Pa.				F. V. R. F
516		Conneaut	End of east pier, at mouth of Conneaut river, Ohio.	41 59 05	80 32 30		F. W.
517		Ashtabula	On the east pier, at the entrance to Ashtabula river, Ohio.	41 54 50	80 47 00		F. V. W. F
518		GRAND RIVER, FAIRPORT.	At Fairport, on the east side of the mouth of Grand river, Ohio	41 45 20	81 14 41		F. W.
519		Grand River, Fairport Beacon.	At Fairport, on the east pier at entrance to Grand river, Ohio.	41 45 45	81 15 15		F. W.
520		CLEVELAND	On the hill, east of the entrance to the harbor.	41 30 07	81 40 23		F. W.

NEW YORK AND VERMONT.

No.	Lens of first order, flashing	Diaphanes, fixed, flashing, revolving	Color of lens or of tower	Height of tower from base to lens plate.	Height of light above sea level	Origin of lens	When built.	When enlarged.	When rebuilt.	Compass range of visibility	Remarks
				Feet.	Feet.						
	6	1½	White	29	43	[⊙ 4]	1856	.....	1871	Entire horizon	Harbor and river light. An elevated iron beacon, with keeper's dwelling, painted white, on masonry pier of protection with breakwater on north and west to shore; light upon Horseshoe Reef shoal, forming southern end of middle reef which separates Canadian from Emerald channel. It bears SE. by S. ½ S. from Fort Erie, Canada, and from Buffalo light W. by N.
		1	White	25	37	[⊙ 4]	1872	.....	.....	Entire horizon	Harbor and river light. An elevated wooden beacon, with a keeper's dwelling, painted white, on a wooden pier of protection, painted black, and situated behind and near the north end of breakwater. Entrance to the harbor is by the north end of the breakwater. Buffalo main light, E. ½ S.; Horseshoe Reef light, W. by N. ½ N.; Fort Erie, Canada, NW. ½ W.
				.....	.....	[⊙ 6]	.....	.....	.....	Entire horizon	Authorized
		1	Grey	41	65	[⊙ 4]	1828	.....	1857	NW. ½ W. by W'd to S. by E. ½ E.	Lake-coast and harbor light. Tower of dark lime-stone near pierhead of south pier of entrance to harbor; dwelling of brick, on light-house lot on south side of Buffalo creek, near its mouth.
67	1 50	16	White	52	87	[⊙ 3]	1837	1857	1869	E. NE. by N'd to SW. ½ W.	Lake-coast and harbor light. Tower and dwelling of brick connected by covered way, whitewashed, situated on bluff half mile west of entrance to harbor.
		12	White	25	35	[⊙ 6]	1837	.....	1844	NE. by N. ½ N. by N'd to W. by N.	Harbor light. Frame beacon, whitewashed, on pier of protection at pierhead of west pier of entrance to harbor; channel, two hundred (200) feet wide. On west side, near beacon, dangerous rocks outcrop, with 8 or 9 feet of water, and on the east (inside) lie the ruins of an old breakwater, with 10 feet of water. A pyramidal wooden day-beacon, painted *black*, surmounted by a round close cage, painted *white*, is placed on the east side of entrance to harbor, and marks the western end of proposed breakwater.

PENNSYLVANIA AND OHIO.

No.	Lens of first order, flashing	Diaphanes, fixed, flashing, revolving	Color of lens or of tower	Height of tower from base to lens plate.	Height of light above sea level	Origin of lens	When built.	When enlarged.	When rebuilt.	Compass range of visibility	Remarks
				Feet.	Feet.						
		18	Light grey	60	115	[⊙ 3]	1838	1867	.....	NE. by E. by N'd to W. SW.	Lake-coast and harbor light. Tower and off-room attached, of light-colored sandstone; dwelling detached, of brick; marks approach to Erie harbor; shore line obscured for a distance of three hundred (300) yards towards lake.
		12	White	30	38	[⊙ 5]	1857	.....	.....	N. ½ E. by E'd to W. SW.	Harbor light. Cast-iron tower on pier of protection behind north pier of entrance to harbor; channel between piers 300 feet wide; best water on north side along the line of buoys. The light is obscured from Peninsula point around by west, to near the line of north pier, produced inside of harbor. Vessels from the west intending to make the harbor will not haul up till this light has been opened, which indicates that Peninsula point has been cleared.
		7	White	4	8	[⊙ 5]	1856	1869	.....	E. ½ N. by S'd to N. by W.	Pier light. Octagonal frame tower, painted *white*, and dome *red*, on west end of north pier, are 242 .
		8	White	33	9¼	[⊙ 5]	1872	.....	.....	N. ½ E. by E'd to W. SW.	Pier light. Small octagonal frame tower, painted white, on east end of north pier. This light and the preceding are used as range for entering the harbor; and then, into the south, with the range lights on the peninsula east north of keeper's dwelling, marks the channel across the inside bar.
		8	White	7	10	[⊙ 6]	1856	1869	1870	S. ½ W. by W'd to W. SW.	Range lights for crossing inner bar, two lights; small lights shown from boxes attached to white masts, tipped with red; distance apart 162 feet. Are illuminated (60).
41		9	White	11	15	[⊙ 6]	1856	1869	1870		
	1 100	11	Red	45	57	[⊙ 4]	1872	.....	.....	.....	Building, 400 feet from lake.
46	.....	12	White	34	41	[⊙ 6]	1835	1858	.....	E. NE. by N'd to W. by S. ½ S.	Harbor light. Frame beacon, whitewashed, on pier of protection behind east pier of entrance to harbor; keeper's dwelling (shore), painted cream color.
47	2 100	12½	White	28	42	[⊙ 5]	1835	1858	.....	E. NE. by N'd to W. SW.	Harbor light. Frame beacon, whitewashed, on pier of protection on east pier of entrance to harbor; keeper's dwelling (shore), painted cream color.
48		17	White	60	100	[⊙ 3]	1825	1858	.....	NE. by E. ½ E. by N'd to W. ½ S.	Lake-coast and harbor light. Sandstone tower, with attached brick, by Paine, situated on bluff on east bank of Grand river, one-quarter mile from its mouth.
49	.....	11	White	21	27	[⊙ 6]	1835	.....	1867	E. by N. ½ N. N'd to W. ½ S.	Harbor light. Frame beacon, whitewashed, on pier of protection behind east pier of entrance to harbor.
50		21	Red	84	154	[⊙ 2]	1829	1852	1859	SW. by W. by N'd to NE. by E.	Lake-coast and harbor light. Tower of brick, with stone finish; octagonal, and resting upon a stone foundation, rising 12' 8" above ground. Keeper's dwelling attached to tower, double, of brick, with stone finish and stone foundation.

PENNSYLVANIA AND OHIO.

Number		Name.	Location	Latitude north.	Longitude west.	Fog-signal.	Description of light (See page 5.)
				° ′ ″	° ′ ″		
[illegible]	Lake Erie	Cleveland Beacon No. 1	On east pier at the entrance to Cleveland harbor, Ohio	41 30 17	81 40 7		F. V. R. F.
[illegible]		Cleveland Beacon No. [illegible]	On east pier at the entrance to Cleveland harbor, Ohio	[illegible]	[illegible]		F.
[illegible]		Black River	On end of east pier at mouth of Black river, Ohio	41 48 40	82 08 14		F. W.
521		Vermilion	On the west pier, at Vermilion harbor, Ohio	41 26 00	82 20 14		F. W.
[illegible]		Huron	At the mouth of Huron river, Ohio, on the west pier	41 24 01	82 32 20		F.

OHIO AND MICHIGAN.

Number		Name.	Location	Latitude north.	Longitude west.	Fog-signal.	Description of light (See page 5.)
526	Lake Erie	CEDAR POINT	On Cedar point, east side of the entrance to Sandusky bay, Ohio	41 29 13	82 41 09		F. W.
527		Cedar Point Range Beacon	On Cedar point, east side of entrance to Sandusky bay				F. W.
528		MARBLEHEAD	On Marblehead, north side of Sandusky bay, Ohio.	41 32 30	82 42 15		F. W.
529		GREEN ISLAND	On west end of Green Island, Lake Erie.	41 38 45	82 51 25		F. V. W. F.
530		WEST SISTER	On west end of West Sister island, Lake Erie	41 44 15	83 06 12		F. W.
531		TURTLE ISLAND	At the entrance to Maumee bay, Ohio	41 45 12	83 22 54		F. W.
532	Detroit River	Maumee Outer Range, front	West side of Maumee river				F. W.
533		Maumee Outer Range, rear					F. W.
534		Maumee Middle Range, front	West side of Maumee river, 14 miles below fort.				F. R.
535		Maumee Middle Range, rear					F. R.
536		Maumee Inner Range, front	East side of Maumee river, 2 miles south of middle range.				F. W.
537		Maumee Inner Range, rear					F. W.
538		Monroe	On the north pier at the entrance to River Raisin, Mich.	41 54 24	83 19 28		F. W.
539		Gibraltar	On Webster avenue, Gibraltar, Mich., 880 feet from Detroit river, Mich.	42 05 31	83 10 57		F. W.
540		Mamajuda	On Mamajuda shoals, in Detroit river, Mich.	42 11 34	83 07 49		F. W.
541		Grassy Island	On Grassy island, in Detroit river, Mich.	42 13 25	83 07 38		F. W.

PENNSYLVANIA AND OHIO.

Description of light (See page 5.)	N.	Range [illegible]	Focal plane above water.	Color of tower or [illegible]	Height of tower from base to lantern.	Height of focal plane above water.	Order of lens.	When built.	When rebuilt.	When relighted.	Compass range of visibility.	Remarks.
F. W. R. F.	1	[illegible]	14	White	40	18	[illegible]	1831	1861	1861	E. by N. ¼ N. to N. by N'd to W. by S. ¼ S.	Harbor light. Octagonal frame tower, painted *white*, above lintel of door, and black below; situated on pier of protection behind each pier.
F.	[illegible]	[illegible]	11½	[illegible]	28	21 ft.	Lantern	1869	[illegible]	1872	[illegible]	A mast near pierhead of east pier, supporting double lights, one red and the other white; the white light four (4) feet above the red light, arranged vertically forms range for entering harbor.
F. W.	[illegible]	[illegible]	14	White	40	18	[illegible]	1836	1867	1871	E. by N. ¼ N. to N'd to W. by S. ¼ S.	Lake-coast harbor light. Tower of brick, on west pier of entrance to Black river, whitewashed; elevated walk above pier connects tower with the shore. No dwelling.
F. W.	1	[illegible]	11	White	20	25	[illegible]	1847	1869	1866	E. by N. ¼ N. to N'd to W. ¼ SW.	Harbor light. Frame beacon, painted white, on pier of protection behind west pier of entrance to Vermilion river; keeper's dwelling ashore, frame, painted white.
F.	[illegible]	[illegible]	17½	White	30	40	[illegible]	1844	1867	1867	E. by S. ¼ S. to N'd to NW. ¼ W.	Harbor light. Cast-iron tower, painted white, on pier of protection behind west pier of entrance to Huron river. Elevated walk connects tower with the shore. Keeper's dwelling ashore, frame, painted cream color.

OHIO AND MICHIGAN.

Description of light (See page 5.)	N.	Range [illegible]	Focal plane above water.	Color of tower or [illegible]	Height of tower from base to lantern.	Height of focal plane above water.	Order of lens.	When built.	When rebuilt.	When relighted.	Compass range of visibility.	Remarks.
F. W.	[illegible]	[illegible]	12	White	21	38	[illegible]	1840	1862	[illegible]	SE. ¼ E. by N'd to N. NW.	Lake-coast and harbor light. Keeper's dwelling of limestone with light on top; east side of entrance to Sandusky bay.
F. W.	[illegible]	[illegible]	10½	White	10	26	[illegible]	[illegible]	1867	[illegible]	SW. ¼ W. by N'd to NE. ¼ E.	Light in keeper's dwelling; frame dwelling painted white, the outer face panelled to traverse the light at pleasure; stands in five (5) feet of water on an insulated shoal, and is surrounded by pier of protection. Forms a range N. 37° E. with Cedar Point light for crossing outer bar.
F. W.	[illegible]	[illegible]	11	White	[illegible]	40	[illegible]	1841	[illegible]	1868	S. SE. by E. ¼ E. and N'd to NW. ¼ W. ¼ W.	Lake-coast and harbor light. Dwelling and tower detached, of rubble masonry and whitewashed, situated on extreme eastern point of peninsula on north side of entrance to Sandusky bay.
F. V. W. F.	[illegible]	[illegible]	11	Gray	14	57	[illegible]	1841	1864	[illegible]	E. ¼ N. by N'd to E. SE. ¼ E.	Lake-coast light. Dwelling and tower attached, of limestone; Marblehead, SE. ¾ E., 10 miles; mouth of Detroit river, NW. by N. ¼ N., 30 miles.
F. W.	[illegible]	12½	Gray	11	51	[illegible]	1847	[illegible]	1867	[illegible]	E. ¼ S. by S'd and W'd to NE.	Lake-coast light. Dwelling and tower attached, of limestone; the tower whitewashed; 12 miles east of Maumee river; Green Island, SE. by E. ¾ E., 14 miles.
F. W.	[illegible]	13½	Yellow	11	50	[illegible]	1841	1867	1867	Entire horizon	[illegible]	Lake-coast and harbor light. Dwelling and tower attached; Milwaukee brick, natural color, square upon south and west end of Turtle island, nine (9) miles distant from Toledo, Ohio; West Sister, E. ¾ S., 12 miles; mouth of Detroit river, NE. by N., 18 miles.
F. W.	[illegible]	[illegible]	10	Red	12	18	[illegible]	1868	[illegible]	[illegible]	NE. ¾ E. by E'd to SE. ¾ S.	
F. W.	[illegible]	[illegible]	11	White	24	28	[illegible]	1868	[illegible]	[illegible]	[illegible]	Range lights; two lights to each range; frame structures; the front ones 1,000 feet in advance of the rear ones, traversed on short railways. These ranges mark the channel in the bay into Maumee river; care must be taken not to mistake the middle range.
F. R.	[illegible]	[illegible]	10	Red	12	18	[illegible]	1868	[illegible]	[illegible]	N. NE. by E'd to E. SE.	
F. R.	[illegible]	[illegible]	11	White	21	29	[illegible]	1868	[illegible]	[illegible]	[illegible]	
F. W.	[illegible]	[illegible]	10½	Red	12	24	[illegible]	1868	[illegible]	[illegible]	N. NW. by N'd to E. NE.	both lights of which are *red*, for the outer and inner ranges, which are composed of *white* lights. Rear towers are painted *white*; the front towers have the lower parts painted *white*; upper, *red*.
F. W.	[illegible]	[illegible]	11½	White	21	32	[illegible]	1868	[illegible]	[illegible]	[illegible]	
F. W.	[illegible]	[illegible]	12½	White	36	42	[illegible]	1849	[illegible]	1867	S. SW. by S'd to N. NE.	Harbor light. Frame tower, painted white, with keeper's dwelling attached, on north pier of entrance to harbor.
F. W.	[illegible]	[illegible]	14	Red	40	47	[illegible]	1848	1872	1855	S. by E. by E'd to N. by E.	Brick tower, natural color, iron lantern painted black to roof, roof red; tower attached to brick dwelling; Bar point is SE. ¾ E., (S. 52½° E.) approximate distance, 5 miles.
F. W.	11	[illegible]	11½	White	34	33	[illegible]	1849	1866	1867	W. by N. by N'd and E'd to W. by S.	River light. Keeper's dwelling frame, painted white, with light on top; pile foundation.
F. W.	11	[illegible]	11½	White	29	34	[illegible]	1849	1867	1867	W. by N. by N'd and E'd to W. by S.	River light. Keeper's dwelling frame, painted white, with light on top; pile foundation.

ELEVENTH DISTRICT. MICHIGAN.

Number.	Name.	Location.	Latitude north.	Longitude west.	Fog signal.	Description of light (See page 8).
	LAKE ST. CLAIR.					
542	Windmill Point	On Windmill point, west side of Detroit river, and entrance to Lake St. Clair, Mich.	42° 21′ 20″	82° 8′ 30″	..	F. V. R. F.
543	St. Clair Flats	At the head of the "Old Cut," or artificial channel through St. Clair flats at South Pass.	42° 33′ 00″	82° 12′ 30″	..	F. W.
544	Beacon	In front of main light, to form a range in passing through the old artificial channel.	...	...	...	F. W.
545	St. Clair Flats Canal, (lower light.)	On the port side of lower entrance to the "Canal."	...	...	...	F. R.
546	Upper Light	On the port side of the upper end of the "Canal."	...	...	...	F. R.
547	FORT GRATIOT	At the head of St. Clair river, Mich.	42° 00′ 22″	82° 24′ 44″	An 8-inch steam whistle giving every minute a blast of 8 seconds' duration, followed by an interval of 52 seconds.	F. V. W. F.
548	POINT AUX BARQUES	On the shore of Lake Huron and south side of the entrance to Saginaw bay.	44° 01′ 23″	82° 47′ 10″	...	F. V. W. F.
549	Tawas, (Ottawa)	On Ottawa point, northwest shore of Saginaw bay, Mich.	44° 15′ 35″	83° 29′ 15″	...	F. V. R. F.
550	CHARITY ISLAND	At the mouth of Saginaw bay, Mich.	44° 02′ 16″	83° 29′ 05″	...	F. W.
551	Saginaw Bay	At the mouth of Saginaw river, Mich.	43° 38′ 38″	83° 50′ 54″	...	F. W.
552	STURGEON POINT	On the western shore of Lake Huron, 21 miles south of Thunder Bay Island.	44° 42′ 49″	83° 16′ 00″	...	F. W.
553	THUNDER BAY ISLAND	On Thunder Bay island, north side of entrance to Thunder bay, Mich.	45° 02′ 17″	83° 11′ 13″	A 10-inch steam fog-whistle, giving a blast of 8 seconds, followed by an interval of 10 seconds; then a blast of 2 seconds, followed by an interval of 40 seconds, alternating in this way every minute. Should the steam whistle get out of repair, a fog-bell struck by machinery will be sounded.	Flg. W.
554	Presque Isle Harbor, front light	At the harbor of Presque Isle, Lake Huron.	45° 29′ 31″	83° 28′ 50″	...	F. W.
555	Presque Isle Harbor, rear light		...	...	...	F. W.

MICHIGAN. ELEVENTH DISTRICT.

Description of light. (See page 5.)	Number	Time between flashes.	Duration of flash in seconds.	Color of flame or lenses.	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When built.	When rebuilt.	When relighted.	Compass range of visibility.	Remarks.
F. V. R. F.	542	m. s. 1 30	13	White	55	67	(⊙) 5	1858		1867	SW. by W. by S'd to NE. by N.	Rubble masonry tower, whitewashed. Keeper's dwelling detached. A guide to Lake St. Clair and the Detroit. With the light abeam, steer E. NE. 11 miles, then NE. ¼ N. 18 miles, which should bring the southern buoys on the flats and the lights in range; bearing NE. by E., with these in range, stand into the channel between the buoys.
F. W.	543		13	Yellow	37	44	(⊙) 4	1859			Entire horizon	Tower connected to keeper's dwelling by a covered way, built of yellow brick, on a pier foundation. Guide to the north entrance of the old channel, which can be entered from 2 to 8 miles from the light-house.
F. W.	544		11	Yellow	23	28	(⊙) 5	1859				Small tower of yellow brick, on pier foundation. With preceding, forms a range to enter the old channel. Distance between the two lights 1,000 feet. Bearing NE. by E.
F. R.	545		13	Red	40	45	(⊙) 4	1871			Entire horizon	Tower, rising from the corner of the dwelling, built of red brick. Marks the lower end of western pier of the "Canal
F. R.	546		13	Red	40	45	(⊙) 4	1871			Entire horizon	Tower, rising from the corner of the dwelling, built of red brick. Marks the upper end of the western pier of the "Canal"
F. V. W. F.	547	2.00	16	White	76	82	(⊙) 3	1825		1867	S. by E. by E'd to N. NW.	Tower of brick; dwelling detached. Marks the entrance from Lake Huron into St. Clair river. Sand Beach point N. by W., 10 miles; Cove Island light, (Canada,) N. by E., 165 miles; Point Clark, (Canada,) N. NE. ¼ E., 82 miles; Goderich, (Canada,) NE. by N., 63 miles.
F. V. W. F.	548	0.10	16½	Yellow	79	80	(⊙) 3	1847	1867		NW. by W. by E'd to SE. by E.	Tower and dwelling of yellow brick, connected by covered way. Coast light, and marks the turning point for vessels entering Saginaw bay; Sturgeon Point light bears N. NW., 54 miles; Thunder Bay Island light, N. by W. ½ W., 73½ miles; Point Clark light, (Canada,) E. ½ N., 53 miles; Charity Island light, (Canada,) NE. by E. ½ E., 70 miles.
F. V. R. F.	549	1.30	14	White	45	54	(⊙) 5	1853		1856	NE. by E'd to SW. by S.	Brick tower, whitewashed; dome of lantern black; keeper's dwelling of brick, detached. This light is on the eastern point of the entrance to Tawas bay; a sand flat extends 1½ miles to the southward and westward from the light; Charity Island light bears S. 15½ miles; Point Douglass (Canada,) E. ½ N., 92 miles; Cape Hurd, (Canada,) NE. ¼ E., 108 miles.
F. W.	550		13	White	30	45	(⊙) 4	1857			S. by W. by N'd to SE. by S.	Tower of brick, connected with frame dwelling by a covered way. This light is on the north point of the island, from which shoals extend from northwest to northeast. The main channel is to the westward of the light. Strangers should not attempt to pass to the eastward of the light. Ottawa Point light bears N. 15½ miles; Saginaw Bay light-house, SW. ½ S., 34½ miles.
F. W.	551		15	White	64	72	(⊙) 4	1841		1863	NW. by W. by N'd to E.	Tower and dwelling, built of rubble stone, detached. This light is on the west side of Saginaw river, near its mouth. Vessels bound into the river, when in 3 fathoms water, should bring the light to bear S. by W., about 3¼ miles distant, and steer that course for the red can buoy at the north entrance of the cut, which is 6,000 feet long and 195 feet wide, ranging S. ¼ W. and N. ¼ E. Both banks are marked by buoys, between which a vessel must be steered towards the mouth of the river. Sand point bears NE. ¼ E., 29 miles; Point aux Gres, N. NE., 25 miles.
F. W.	552		15	Yellow	65	69	(⊙) 3½	1869			S. by W. by E'd to S. ¼ W.	Tower and keeper's dwelling connected; built of yellow brick. Thunder Bay Island light bears N. by E., 23 miles; Point aux Barques light, S. SE. ½ E., 54 miles; Goderich, (Canada,) SE. ¼ E., 104 miles; Cove Island light, (Canada,) NE. by E. ½ E., 87 miles.
Flg. W.	553	1.30	14	White	56	59	(⊙) 4	1842		1867	Entire horizon	Stone tower, connected with brick dwelling by a covered way, on the southeast point of the island. Vessels must not attempt to pass to the westward of this light; Middle island bears N. NW. ½ W., 12 miles; Sturgeon Point light, S. by W., 23 miles; Great Duck island, Canada, N. by E. ¼ E., 13 miles; Cove Island light, (Canada,) E. NE. ½ E., 74 miles.
F. W.	554		10	White	16	18	(⊙) 6	1870			E. by N. ½ N. by S'd to E. SE.	Front light in wooden tower; rear light on keeper's frame dwelling. Distance apart 1,000 feet, bearing E. and W. In approaching the entrance to the harbor, when in 7 fathoms water, bring the two lights in range, and run in on that line to the anchorage.
F. W.	555		12	White	25	36	(⊙) 6	1870				

MICHIGAN.

Number		Name.	Location.	Latitude north	Longitude west	Fog-signal	Description of light. (See pages.)
				° ′ ″	° ′ ″		
556	Lake Huron	PRESQUE ISLE	About 25 miles northwest of Thunder Bay light, Mich.	45 21 10	83 29 19		F. W.
557		SPECTACLE REEF	On Spectacle reef, to the eastward of the entrance to the Straits of Mackinac, in Lake Huron.	45 46 15	83 03 45	A 10-inch steam fog-whistle, giving a blast of 3 seconds followed by an interval of 12 seconds, then a blast of 3 seconds, followed by a pause of 42 seconds, and in the same way every minute.	F. R.*
558		DETOUR	At the mouth of the river Sault Ste. Marie, Lake Huron, Mich.	45 57 20	83 54 22	A 10-inch steam fog-whistle giving every minute a blast of 10 seconds followed by an interval of 50 seconds.	F. W.
559		BOIS BLANC	On the north side of Bois Blanc island, in the Straits of Mackinac, Mich.	45 48 35	84 24 36		F. W.
560		CHEBOYGAN	On the main land, opposite to Bois Blanc island, marking the eastern entrance to the Straits of Mackinac, Mich.	45 40 00	84 24 36		F. V. W. F.
561		MCGULPIN'S POINT	Near Old Mackinac, in the Straits of Mackinac, on the southern side of the entrance to Lake Michigan.	45 47 13	84 45 40		F. W.

MICHIGAN AND INDIANA.

Number		Name.	Location.	Latitude north	Longitude west	Fog-signal	Description of light. (See pages.)
562	Lake Michigan	ST. HELENA	On the southeast point of St. Helena island, in the Straits of Mackinac, Mich.	45 51 15	84 46 50		Flg. R.
563		WAUGOSHANCE	On Waugoshance shoal, and the Straits of Mackinac, and near the entrance to Lake Michigan.	45 47 14	84 04 56	A bell struck by hand.	F. V. W. F.
564		SKILLIGALLEE (Ile aux Galets)	On the Skilligallee rock (Ile aux Galets) 8 miles S. SW. ¼ W. from Waugoshance light, and 6 miles from the main land, Mich.	45 40 34	85 09 46	A horn sounded at intervals of 5 minutes.	F. W.
565		Beaver Island Harbor	On the north point of the entrance to the harbor.	45 44 36	85 30 06		F. R.
566		BEAVER ISLAND	On the south end of Beaver island, Lake Michigan.	45 34 26	85 33 59		F. V. W. F.

* Temporary.

MICHIGAN.

Description of light (See page)											Compass range of visibility.	Remarks.
F. W.			18½	Red	100	124	[⊙ 5]	1840	1870		SW. ¼ W. to E. ¼ N. W. ¼ N.	A coast light, on the northern point of the peninsula. The buildings consist of a tower of red brick with a keeper's dwelling attached, of brick. The Detour light bearing N. SW. ¼ W., 18 miles; the east point of Isle Bois Blanc, NW. by W., 51 miles; Spectacle reef, NW. ¼ W., 4½ miles; the centre of the Great Duck (Canada) NE. ¼ E., 13 miles.
F. R.*			11½	White	29	32	[⊙ 4]	1871			Entire horizon	Building. The present light is temporary, and will only be exhibited during the working season. From the westward it is hidden by the stone tower in progress of construction. When the structure is completed, a light of the proper distinction and power will be exhibited. Presque Isle light house, SE. ¼ E., distant 42 miles; Cheboygan light-house, SW. by W. ¼ W., 18 miles; Bois Blanc light-house, W. by N., 14 miles; Mackinac Island, (Fort Holmes,) W. by N. ¼ N., 24 miles; Detour light house, NE. ¼ N., 10½ miles.
F. W.			14½	White	79	75	[⊙ 3]	1847	1861	1870	N. NE. by N'd to W. by N.	Iron-pile structure, connected with wooden dwelling (painted white) by a covered way. Marks entrance from Lake Huron into St. Mary's river. The south point of Garden City reef, W. SW. ¼ W., 11½ miles; Spectacle reef, SW. ¼ S., 17 miles; Bois Blanc light, W. SW., 26 miles; Cheboygan light, SW. ¼ W., 31½ miles; Presque Isle light, S. SE. ¼ E., 47½ miles; Chantry Island light, (Canada,) SE. ¼ E., 160 miles; Goderich, (Canada,) SE. by S., 190 miles.
F. W.			13½	Yellow	38	53	[⊙ 4]	1839	1867		W. by N. by N'd to SE. ¼ E.	Tower rises from dwelling of yellow brick. A guide to the north channel of Mackinac; the Detour light bearing E. NE., 26 miles; the south point of Garden City reef, NE. by E. ¼ E., 14½ miles; Spectacle reef, E. SE. ¼ E., 13½ miles; Fort Mackinac, W. NW. ¼ W., 0½ miles.
F. A. W. F.				White	33	37	[⊙ 5]	1851	1859		W. by N. by N'd to E. ¼ S.	Light on keeper's wooden dwelling. Marks entrance into the south channel of the Straits of Mackinac. The south point of Isle Bois Blanc bears N., and the channel opposite the light is 3 miles wide. Old Fort Mackinac on the main, NW. by W. ¼ W., 16½ miles.
F. W.			17½	Yellow	38	102	[⊙ 5½]	1848			W. SW. by N'd to E.	Tower rises from dwelling of yellow brick. To mark turning point in Straits of Mackinac, 2½ miles west of Old Fort Mackinac, and a guide through the straits. The channel abreast of the light is 3 miles wide; the South Graham shoal, NE. ¼ E., 4½ miles; Isle of St. Helena, NW., 6 miles; Waugoshance, W., 15½ miles.

MICHIGAN AND INDIANA.

Description of light (See page)											Compass range of visibility.	Remarks.
Fig. R.			15	Red	65	74	[⊙ 4]					Building. Tower and dwelling of red brick, connected by covered way. The light is to guide vessels under the lee of St. Helena Island. It is also a leading mark to vessels passing westward through the south channel of the Straits of Mackinac. Waugoshance light, W. SW., 12 miles. McGulpin's Point light, SW., 5½ miles. White shoals, W. ¼ S., 14 miles.
F. V. W. F.			15	White and black.	65	74	[⊙ 4]	1851			Entire horizon	Tower with dwelling attached, of brick. Keeper's dwelling and lower part of the tower white, upper part of the tower black. Marks Waugoshance shoal, and turning point at western end Straits of Mackinac. St. Helena reef, NE. by E., 9½ miles; the southwest end of Manitou Paymont shoal, N. ¼ E., 12 miles; the east end of Simmon's reef, N. NW. ¼ W., 10½ miles; White shoal, NW. ½ N., 4½ miles; Gray's reef, W. 7½ miles; Hog Island reef, W. SW. ¼ W., 12½ miles; Skilligallee light, S. SW. ¼ W., 8 miles.
F. W.			18	Yellow	100	106	[⊙ 3]	1850	1867	1867	Entire horizon	Tower and dwelling of yellow brick, connected by a covered way. A guide to and from the Straits of Mackinac, 54 miles from the Michigan shore. Reef extends from the light NW. three-quarters mile, and NE. by E. ¼ E. 14 miles. The east end of Hog Island reef bears W. NW. 8½ miles; the east end of Gray's reef, N. by W. ¼ W. 7½ miles.
F. R.			12	White	34	37	[⊙ 4]	1856	1870	1870	E. by N. by E'd to S. SE.	Brick tower and dwelling, connected by a covered way. Guide to anchorage, to Beaver harbor. Shilligallee light bears E. by S. ¼ S., 17 miles. This course would pass seven-eighths of a mile south of Hog Island reef. Hog Island reef, E. ¼ E. ¼ S., 7½ miles. The entrance to Little Traverse bay, SE., 31 miles.
F. V. W. F.			17½	Yellow	40	104	[⊙ 4]	1858	1858	1858	E. SE. to S. ¼ E. to W. by N.	Tower and dwelling of brick, connected by a covered way. A guide through the passage between the Beaver and North Fox Islands. This channel is 9½ miles wide. The Grand Traverse light, S. ¼ E., 25 miles; the South Fox Island light, SW. ¼ S., 19 miles; Pilot Island light, W. SW. ¼ W., 69 miles; Rock Island light, W. by S., 62 miles.

MICHIGAN AND INDIANA.

Number	Name.	Location.	Latitude north.	Longitude west.	Fog signal.	Description of light. See page.
			° ′ ″	° ′ ″		
567	SOUTH FOX ISLAND	On the extreme southeast end of South Fox Island, Mich	45 22 40	86 10 10		Fog B
568	GRAND TRAVERSE	On the northwest point of Grand Traverse bay, Mich	45 12 24	85 34 40		F W
569	Mission Point	On the north point of the peninsula dividing Grand Traverse bay, Mich	44 50 30	85 28 00		F W
570	SOUTH MANITOU	On South Manitou island, near the east shore of Lake Michigan	45 00 28	86 04 20	A bell struck by machinery	F W
571	POINT BETSEY	On Point aux Bees Scies, 25 miles S. by W. ¼ W. of South Manitou island, east side of Lake Michigan	44 41 40	86 14 15		F V W F
572	Manistee	Near beside of Manistee river, east shore of Lake Michigan, 16 miles north of Grande Pointe au Sable	44 14 37	86 19 37		F W
573	GRANDE POINTE AU SABLE.	On Grande Pointe au Sable, 45 miles south of Point Betsey light, east shore of Lake Michigan	44 03 25	86 28 00		F W
574	Pere Marquette	At Ludington, on the east side of Lake Michigan, 8 miles south of Grande Pointe au Sable, Mich				F R
575	PETITE POINTE AU SABLE.	On Petite (Little) Pointe au Sable, 20 miles south of Grande Pointe au Sable light, east shore of Lake Michigan				F V W F
576	White River	At the mouth of White river, east shore of Lake Michigan, 12 miles north of Muskegon light				F R
577	Muskegon	At the mouth of Muskegon river, east shore of Lake Michigan	43 14 30			F W
578	Pierhead Light	On the outer end of the South pier (Port Sherman), Muskegon, Lake Michigan				F R
579	Grand Haven	At the south side of the mouth of Grand river, 30 miles north of Kalamazoo river, Mich	43 03 27	86 14 24	A bell struck by hot-air engine	F V W F
580	Pierhead Light	On the pier at Grand Haven				F W
581	Holland, (Black Lake)	On the south pier at the harbor of Holland, (Black lake,) east shore of Lake Michigan	42 47 00			F R
582	Kalamazoo	On the north side of the mouth of Kalamazoo river, about 10 miles N. by E. ¼ E. of St. Joseph's, Mich	42 40 00			F W
583	South Haven	On the outer end of the South Harbor pier	42 27 00			F R
584	St. Joseph's	On the south side of the mouth of St. Joseph's river, Mich	42 06 30			F V W F
585	Pierhead Light	On the outer end of the south pier, at the harbor of St. Joseph's				F W

Lake Michigan.

MICHIGAN AND INDIANA.

Description of light. See page 5.												Compass range of visibility	Remarks
F'g R	567	.....	15	Yellow	.....	39	68	[⊙ 4]	1867	.....	.....	NW. by N. by W'd to NE. by N. ¼ N.	Tower rises from dwelling of brick. A guide through the passage 1½ miles wide between South Fox and North Manitou islands. From the light a bank extends south 9½ miles which is from 1½ to 4½ miles wide. The soundings are from 4 to 6 and 8 fathoms. To the east and west of the bank there is from 5 to 10 fathoms of water. Close to on the bank there are two small islands bearing, respectively, from the light S. by W., 4½ miles, with 11 feet, and S. ¼ W., 7½ miles, with 16 feet. Grand Traverse light, SE. ¼ E., 18 miles; the northwest point of North Manitou, SW. by S., 4½ miles; Pottawatomie light (Rock Island), W. ¼ N., 4½ miles.
F. W	568	.....	17	Yellow	.....	40	60	[⊙ 4]	1858	1858	1870	W. ¼ W. by N'd to NE.	Light on brick dwelling. A guide to Grand Traverse bay and to the passage between the Manitou's and Sleeping Bear. The NE. point of the North Manitou, W. by S., 23 miles. Pilot Island light, W. ¼ N., 27 miles.
F. W	569	.....	14	White	.....	35	48	[⊙ 5]	1870	.....	.....	W. by S. by N'd to SE. by E. ¼ E.	Light on keeper's frame dwelling. A guide into the east and west arms of Grand Traverse bay. Reef extends from this point northward 11 miles. Northport, N. ¼ W., distant 11½ miles. Elk Rapids, S. 25° E., distant 7 miles.
F. W	570	.....	17½	Red	.....	93	104	[⊙ 4]	1869	1858	1858	NE. by N. by N'd to SW. by W.	A tower of red brick, connected by a covered way with keeper's dwelling of yellow brick. Guide to anchorage of South Manitou harbor, and showing the passage between the Manitou islands and the main shore. Point Betsey light, S. by W. ¼ W., 24 miles; Sleeping Bear, S. by E. ¼ E., 74 miles.
F. V. W. F	571	1.30	14	Yellow	.....	34	44	[⊙ 4]	1858	.....	.....	NE. by N'd to S.	A tower and dwelling of yellow brick, connected by a covered way. Poe'ds Mort light, NW. ¼ N., 52 miles; Cana Island light, NW. by W., 18 miles.
F. W	572	.....	13	White	.....	.....	.....	[⊙ 6]	1869	1872	.....	N. ¼ E. by W'd to S. by W. ¼ W.	Guide to entrance of Manistee harbor; Cana Island light, N. NW. ¼ W., 17 miles; Manitowoc light, W. by S., 87 miles; Sheboygan light, SW. by W. ¼ W., 70 miles; Grande Point au Sable light, SW. ¼ S., 17 miles.
F. W	573	.....	17½	Yellow	.....	100	100	[⊙ 4]	1867	.....	.....	NE. by N. by W'd to S. by E.	Tower and dwelling of yellow brick, connected by a covered way; top of lantern black; Pointe au Sable, S. ¼ W., 29 miles; Cana Island light, N. by W. ¼ W., 70 miles; Manitowoc light, W. ¼ N., 36 miles; Sheboygan light, W. SW. ¼ W., 60 miles.
F. R	574	.....	12	White	.....	20	36	[⊙ 5]	1870	.....	.....	.....	Wooden tower on the end of the south pier. A guide into the harbor.
F. V. W. F	575	.....	.....	.....	.....	.....	.....	[⊙ 4]	.....	.....	.....	.....	To be built. St. Joseph's light bears S. ¼ W., 108 miles; Chicago light, S. SW. ¼ W., 135 miles; Twin River point, NW. ¼ W., 62 miles.
F. R	576	.....	11½	White	.....	.....	33	[⊙ 5]	1872	.....	.....	.....	A wooden tower on the outer end of the South Harbor pier. A guide into the harbor.
F. W	577	.....	13	White	.....	37	45	[⊙ 4]	1851	1870	1870	NW. by N. ¼ N. by W'd to S. by E.	Light on keeper's frame dwelling, on south side of Muskegon river. A coast and harbor light. Twin rivers, NW. ¼ N., 87 miles; Kenosha, SW. by W., 80 miles.
F. R	578	.....	12	.....	.....	.....	36	[⊙ 6]	1871	.....	.....	.....	A wooden tower on the outer end of the South Harbor pier. A guide into the harbor.
F. V. W. F	579	1.30	15	White	.....	44	70	[⊙ 4]	1855	.....	1869	N. NW. by W'd to S.	Light on stone and brick tower, which is connected with the keeper's dwelling. A coast and harbor light marking entrance to Grand Haven; Manitowoc light, NW., 100 miles; Milwaukee light, W. ¼ S., 87 miles; Racine, W. SW. ¼ W., 83 miles; Chicago, SW. ¼ S., 100 miles; Michigan City, S. by W. ¼ W., 100 miles; St. Joseph's light, S. by W., 68 miles.
F. W	580	.....	12	.....	.....	.....	37	[⊙ 6]	1871	.....	.....	.....	A wooden tower on the outer end of the pier. A guide into Grand Haven.
F. R	581	.....	11½	White	.....	27.7	32	[⊙ 5]	1870	.....	.....	N. ¼ W. by W'd to S.	Wooden tower on the end of south pier. A guide into the harbor of Holland. Chicago, SW. ¼ W., 96 miles; Milwaukee, W. by N., 90 miles; Sheboygan, NW. ¼ W., 101 miles.
F. W	582	.....	13½	White	.....	35	53	[⊙ 5]	1852	1859	1870	N. by W'd to S. by E.	Light on keeper's wooden dwelling. Marks the entrance to Kalamazoo river. Muskegon light, N. ¼ W., 40 miles; Sheboygan light, NW., 106 miles; Milwaukee light, W. by N. ¼ N., 90 miles; Racine, W. ¼ N., 82 miles; Chicago, SW. ¼ W., 90 miles; Michigan City light, S. SW. ¼ W., 75 miles.
F. R	583	.....	11½	White	.....	.....	32	[⊙ 5]	1872	.....	.....	.....	Wooden tower on the end of south pier, at the mouth of South Black river at South Haven.
F. V. W. F	584	1.30	17	White	.....	43.4	101	[⊙ 4]	1831	1859	.....	N. NE. by W'd to SW. by S.	Light on keeper's wooden dwelling. Sheboygan, NW. by N., N., 120 miles; Milwaukee, NW. ¼ W., 87 miles; Chicago, W. SW. ¼ W., 62 miles; Michigan City, SW. ¼ S., 36 miles.
F. W	585	.....	12	White	.....	29	34	[⊙ 6]	1831	1870	1870	.....	Wooden tower on the outer end of the south pier. A guide into the river.

MICHIGAN AND INDIANA.

Number	Name	Location	Latitude North	Longitude West	Characteristic	Description of Structure, Illumination
[illegible]	Michigan City	[illegible]	[illegible]	[illegible]		F W
[illegible]	Pierhead Lights	[illegible]				F W
[illegible]	Lights	[illegible]				
[illegible]	Chicago	[illegible]	[illegible]	[illegible]		F W
[illegible]	Pier Light	[illegible]				F
[illegible]	Grosse Point	[illegible]	[illegible]			F V R I

WISCONSIN AND MICHIGAN.

[illegible]	WAUKEGAN, Little Point	[illegible]	[illegible]			F W
[illegible]	KENOSHA, southpier	[illegible]	[illegible]	[illegible]		F V [illegible]
[illegible]	Pierhead Light	[illegible]				[illegible]
[illegible]	Racine, Root River	On the north pier at the harbor of Racine, Wis.	42° [illegible]	87° 48′ [illegible]		F W
[illegible]	Pierhead Light	On the outer end of the south pier of the harbor of Racine, Wis.				F R
[illegible]	Milwaukee Pierhead Light	On the outer end of the south pier of the harbor of Milwaukee, Wis.				F R
[illegible]	North Cut Beacon	On the north pier at the harbor of Milwaukee, Wis.	[illegible]	[illegible]	A frame	F R
[illegible]	MILWAUKEE	At north pier of Milwaukee harbor, Wis.	[illegible]	[illegible]		F V W I
[illegible]	Port Washington	At Port Washington, on the south side of the harbor entrance, Wis.	[illegible]	[illegible]		F W
[illegible]	Sheboygan	On [illegible] south side of the mouth of Sheboygan river, Wis.	[illegible]	[illegible]		F W
[illegible]	Manitowoc	Near the outer end of the north pier at the mouth of Manitowoc river, Wis.	[illegible]	[illegible]		F V W I
[illegible]	Bailey's Harbor, front	[illegible]	[illegible]	[illegible]		F W
[illegible]	Bailey's Harbor, rear	[illegible]				F W
[illegible]	CANA ISLAND	On Cana island [illegible] miles S. SW. of the south entrance to Green Bay, Wisconsin, and [illegible] to the northward of entrance to Bailey's harbor.	[illegible]	[illegible]		F W

MICHIGAN AND INDIANA.

Description of Light	Number	Name	Height	Focal Plane	Character	Date of Establishment	Discontinued	Position	Remarks
F. W.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	NE. by N. [illegible]	Frame on keeper's brick dwelling. Grande Pointe au Sable N. ½ E., 183 miles. This course would [illegible] of Little Point [illegible] N. [illegible] W. 116 miles. W. [illegible] N., W. [illegible] miles. [illegible] W. NW. [illegible]
F. R.	[illegible]	White	[illegible]	30	[illegible]	1861	[illegible]	[illegible]	A wooden tower at the outer end of the East Harbor pier. A guide into the harbor.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	To be established.
F. W.	[illegible]	[illegible]	[illegible]	30	[illegible]	1866		N. by W. ½ W. to E. by S. ½ SE.	[illegible] connected by a covered way with a wooden dwelling painted white. Grande Pointe au Sable N. by E. ½ E., 105 miles. Pilot Island, Poet du Mort light-house N. [illegible] 50 miles. Manitou [illegible] N. ½ E., 150 miles.
[illegible]	[illegible]	White	[illegible]	[illegible]	[illegible]	[illegible]			Wooden [illegible] marks the outer end of north pier and guides into harbor.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			Buoying. Twin River point N. ½ E., [illegible] Pointe au Sable N. NE., 1[illegible] miles; Grand Haven, NE. [illegible] miles; St. Joseph, E. ½ N., [illegible]

WISCONSIN AND MICHIGAN

Description of Light	Number	Name	Height	Focal Plane	Character	Date of Establishment	Discontinued	Position	Remarks
F. W.	[illegible]	White	[illegible]	[illegible]	[illegible]	1840	1900	1900	N. NE. by E. ½ E. to SE.	Light on keeper's frame dwelling. Grand Haven, NE. by E. ½ E., 35 miles; Pointe au Sable, NE. ½ N., 110 miles; Point Betsey, N. NE. ½ E., [illegible] miles.
F. V. S.	[illegible]	Yellow	[illegible]	20	[illegible]	1840	1900		N. by E. ½ E. to E. by S. ½ S.	Light on dwelling of yellow brick attached. St. Joseph's, SE. by E. ½ E., 76 miles; Grand Haven, E. NE., [illegible] miles; Manitou, N. NE., [illegible] miles. This course would pass 11 miles to the westward of Point Betsey light.
F. R.	[illegible]	White	[illegible]	[illegible]	[illegible]	1848	1900	1870		Wooden tower on the end of the north pier. A guide into the harbor.
F. W.	[illegible]	Yellow	[illegible]	[illegible]	[illegible]	1840		1870	NE. by N. ½ N. to [illegible]	Coast and harbor light. Yellow brick, [illegible] from back of dwelling. One and three-quarter [illegible] the light is a short extending south ¼ mile. Boat [illegible] Muskegon, NE. by E. ½ E., 83 miles; Grande Pointe au Sable, NE. ½ N., [illegible] miles.
F. R.	[illegible]	White	[illegible]	[illegible]	[illegible]	[illegible]		1900		A wooden tower at the extreme end of the north pier forms with the succeeding a guide into harbor.
F. R.	[illegible]	Yellow	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		A yellow brick tower, rising from the keeper's dwelling, forms with the preceding a guide into harbor.
F. R.	[illegible]	Yellow	[illegible]	18	[illegible]	[illegible]				A yellow brick tower rising from the keeper's dwelling. A guide to the entrance of the harbor between the piers.
F. V. W. I.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			N. [illegible] to [illegible]	Coast light. Yellow brick tower and dwelling attached. A guide to Milwaukee bay. Muskegon, E. by N., [illegible] miles; Pointe au Sable, NE. by E. ½ E., [illegible] miles.
F. W.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Light on keeper's dwelling of yellow brick. Point Betsey, NE. ½ N., 121 miles; Grand Haven, E. SE. ½ E., [illegible] miles.
F. W.	[illegible]	[illegible]	White	[illegible]	[illegible]	[illegible]	[illegible]		N. by N. to [illegible]	Light on keeper's frame dwelling. East of the light and the piers there is a reef, on north and south ends of which buoys are placed. The South Manitou, NE. ½ N., 123 miles; Twin River point, N. by E. ½ E., [illegible] miles.
F. V. W. I.	[illegible]	[illegible]	White	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	NE. [illegible] to [illegible] W.	A stone tower, connected with keeper's dwelling by a covered way. Muskegon, SE. ½ E., 80 miles; Manitou, E. ½ N., [illegible] miles.
F. W.	[illegible]	[illegible]	White	[illegible]	[illegible]	[illegible]	[illegible]	1870	[illegible] by E. ½ E. to [illegible] ½ N.	Rear light on keeper's frame dwelling, front light in wooden tower, at 4 miles distance from the entrance to the channel leading to the anchorage. Bring the lights in range, bearing N. NW. ½ W., and stand into the bay for anchorage. Lights 1,000 feet apart NW. by N. ½ N. and SE. by S. ½ S. Sleeping Bear point E. ½ S., [illegible] miles. The old white tower of the former [illegible] corner, is still standing, and serves as a good day-mark for approaching the harbor.
F. W.	[illegible]	[illegible]	White	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
F. W.	[illegible]	[illegible]	Yellow	80	88	[illegible]	1861		N. by E. ½ E. to W. by S. ½ S.	Tower and dwelling of yellow brick, connected by a covered way. Light on South Fox Island bears E. by N. ½ N., 62 miles; south point of South Manitou Island, E. ½ S., 45 miles; Point Betsey, SE. by E., 48 miles, and the Bailey's Harbor entrance 4 miles to the southward.

WISCONSIN AND MICHIGAN.

Number		Name.	Location.	Latitude north.	Longitude west.	Fog-signal.	Description of light. (See page 5.)
				° ′ ″	° ′ ″		
606	LAKE MICHIGAN.	PORT DU MORT. (Pilot Island.)	On Pilot Island, in the southern entrance to Green Bay, Mich.	45 16 30	86 55 03	A horn, operated by a hot-air engine	Flg. W.
607		POTTAWATOMIE	On the north point of Rock Island, north side of the entrance to Green Bay, Mich.	45 25 40	86 40 36		F. W.
608		POINT PENINSULA	On the point between Little and Big Bays de Noquet.	45 40 05	86 57 41		Flg. W.
609		Escanaba	At the extreme end of Sand point, in Little Bay de Noquet.	45 44 23	87 02 26		F. R.
610	GREEN BAY.	EAGLE BLUFF	Two miles north of Fish creek, in Green bay.	45 10 00	87 14 09		F. W.
611		CHAMBERS'S ISLAND	On the northwest end of Chambers's island, Green bay.	45 12 41	87 20 00		F. V. W. F.
612		GREEN ISLAND	On the southeast point of Green island, off Menominee river, Green bay.	45 03 15	87 30 00		F. W.
613		Tail Point	Near the mouth of Fox river, at the head of Green bay, Wis.	44 35 19	87 59 48		F. W.
614		Grassy Island, upper light	At the east side of the outer end.	44 33 37	87 55 10		F. W.
615		Grassy Island, lower light	At the east side of the inner end of the artificial cut through Grassy island, near the mouth of Fox river, Green bay, Wis.				F. W.
616	LAKE SUPERIOR.	Round Island	In White Fish bay, near entrance to river Ste. Marie.	46 26 36	84 31 34		F. W.
617		POINT IROQUOIS	On south shore of White Fish bay, Lake Superior	46 29 05	84 37 51		Flg. W.

WISCONSIN AND MICHIGAN.

No.	Lat.	Long. between Greenwich and Washington	Color of tower (or house)	Height of tower from base to focal plane.	Height of light above sea level.	Optical apparatus.	When built.	When rebuilt.	When refitted.	Compass range of visibility.	Remarks.	Description of light. (See page 5.)
606	1.00	12	Yellow	34	38	[⊙ 4]	1840	1858	.....	E. NE. by E'd to S.	Light on yellow brick dwelling. To enter Port du Mort from Lake Michigan, bring the light at 5 miles distance, in 19 or 20 fathoms water, to bear from NW. by W. to N. NW. ¼ W., and steer for it until the light bears N., 1¼ miles distant; then NW. ½ W., 5 miles, into Green Bay. This course will pass south of Plum island. Strangers should not attempt to pass north of Plum island. The northeast shores of the peninsula of Green Bay and Washington island are fringed with rocky shoals, requiring a vigilant look-out and use of the lead. Beaver Island light bears E. by N. ¼ N., 66 miles; South Fox Island light, E. ½ N., 53 miles.	Flg. W.
607	.....	19	Grey	34	137	[⊙ 1]	1839	1858	1858	S. SW. by N'd to E. by S.	Light on keeper's dwelling built of stone. A guide to Green Bay through the passage between Rock and St. Martin's islands. A 16-foot shoal in the channel bears NE. by E. ½ E., 3¼ miles from the light. From the southeast point of Rock island there are two dangerous reefs, with only 4 feet water, bearing SE. by E. ¼ E., 2¼ miles, and S. SE. 3¼ miles. Vessels from Lake Michigan for Green Bay can bring the light to bear, in 18 fathoms water, from W. by N. to W. by S., and stand for it, hauling half a mile to the northward as they approach the light, with the light abeam when standing for the westward. Boyer's bluff, the northwest point of Washington island, one of the most prominent headlands in Green bay, will bear W. by S. ¾ miles.	F. W.
608	0.30	12½	Yellow	36	41	[⊙ 1]	1865	.....	1870	E. NE. by S'd to N. NW.	Tower rises from keeper's dwelling, built of yellow brick. Marks approach to Little and Big Bays de Noquet. A dangerous shoal extends south from the light 1½ miles, on which there is a red spar buoy. There is also a 13-foot spot, S. by W. ½ W., 2¼ miles from the light, on which there is a 3d class iron can buoy painted with red and black horizontal stripes. Sand Point light-house bears NW. by W., 6¼ miles; Chambers's Island light-house, S. SW. ½ W., 37¼ miles; Boyer's bluff, S. ½ E., 17 miles; south point of Poverty island S.E. ½ E. 17 miles.	Flg. W.
609	.....	13	Yellow	39	44	[⊙ 4]	1867	.....	.....	N. by W. by E'd to S. by W.	Tower rises from keeper's dwelling, built of yellow brick. A guide into the harbor of Escanaba and Little Bay de Noquet. To the eastward of the light is a sand flat extending a half mile, on which is a black buoy. Boyer's bluff, S. by E. ¼ E., 23 miles; Whale's Back shoal, S. by W. ½ W., 27 miles.	F. R.
610	.....	15	Yellow	38	76	[⊙ 3½]	1868	.....	.....	NE. by N'd to N. NW.; also S. SW. to W. by S. ½ S.	Tower rises from the corner of keeper's dwelling, built of yellow brick. A guide through the Strawberry passage, between the islands and the main shore. Strangers should not attempt to pass between the Strawberries and Chambers's island. Horseshoe reef, N. by E. ¼ E., 3¼ miles. Eagle harbor, to the northward of the light, is a good harbor of refuge.	F. W.
611	1.00	15	Yellow	38	68	[⊙ 4]	1868	.....	.....	E. NE. by N'd to SW. by W.	Tower rises from the corner of keeper's dwelling, built of yellow brick. A guide through the western passage (3¼ miles wide) between the island and the main. A reef extends off the north point of the island 1¼ miles. Strangers should not pass to the eastward of this island, or between it and the Strawberries. Whale's Back shoal, NE. ½ N., 14 miles; Point Rocheteau, N. NW. ½ W., 7 miles; Menominee, SW. by W., 13 miles.	F. V. W. F.
612	.....	14	White	40	55	[⊙ 4]	1863	.....	.....	Entire horizon, except W. to NW.	Light on keeper's dwelling, built of brick. Reefs extend off from the SE. and NW. points of this island a half and 1 mile, respectively. The best channel (6 miles wide) is to the eastward of this island. The northwest end of Chambers's island bears NE. by N. ¼ N., 11 miles. The southeast point of Peshtigo shoal, SW. by S., 8 miles; Sturgeon bay, S. by E. ½ E., 11 miles.	F. W.
613	.....	14	White	56	56	[⊙ 1]	1848	1859	.....	N. NE. to S. SE.	Light on keeper's dwelling, built of wood. A guide to the entrance of Fox river, Green Bay city. The southeast extreme of Peshtigo reef, NE. ¼ N., 32 miles. Hat island, NE., 18 miles.	F. W.
614	.....	13	White	.....	37	[⊙ 6]	1872	.....	.....	Entire horizon	Wooden tower 676 feet apart. Keeper's wooden dwelling between the two towers, which form a range, guiding through the artificial cut into Fox river. Bearing of range NE. by N. ½ N.	F. W.
615	.....	11	White	.....	30	[⊙ 6]	1872	.....	.....	Entire horizon.		F. W.
616	.....	13½	White	35	50	[⊙ 5]	1855	.....	1870	NE. by E. by N'd to W. SW.	Light on square stone tower, rising from the corner of the keeper's dwelling. A guide to and from the entrance to Lake Superior.	F. W.
617	0.30	15	Red	55	72	[⊙ 4]	1857	1870	1870	SE. by N'd to W. NW.	The light is on a red-brick tower, connected with the keeper's dwelling by a covered way. A guide to and from the river Ste. Marie. Passage island, N. by W. ¼ W., 12 miles; White Fish point, NW. ½ N. 25 miles.	Flg. W.

WISCONSIN AND MICHIGAN.

Number.		Name.	Location.	Latitude north.	Longitude west.	Fog-signal.	Description of light. (See page 5.)
				° ′ ″	° ′ ″		
618		WHITE FISH POINT	On White Fish point, at the outlet of Lake Superior, Mich.	46 46 18	84 57 21	A 10-inch steam fog-whistle, giving a blast of 8 seconds, followed by an interval of 10 seconds; then a blast of 2 seconds, followed by an interval of 40 seconds. Alternating in this manner every minute.	F. W.
619		BIG SABLE	At Big Sable point, on the south shore of Lake Superior, between White Fish point and Grand island.	...	...	...	F. W.
620		GRAND ISLAND	North point of Grand island, on a high bluff.	46 33 40	86 40 50	...	F. A. W. F.
621		Grand Island Harbor	On the low sand point projecting from Grand Island into the east entrance to Grand Island harbor.	...	...	...	F. W.
622		Grand Island Harbor Range, front light.	On the main land at west entrance to Grand Island harbor.	...	...	...	F. W.
623		Grand Island Harbor Range, rear light.	On the main land at west entrance to Grand Island harbor.	...	...	...	F. W.
624	LAKE SUPERIOR.	Marquette	On the north point of Marquette harbor.	46 32 55	87 22 12	...	F. W.
625		GRANITE ISLAND	On Granite island, 12 miles northwest of Marquette.	46 43 22	87 24 25	...	F. V. R. F.
626		HURON ISLAND	On West Huron island, off Huron bay.	46 57 47	87 59 3[illegible]	...	F. W.
627		Portage River	Near mouth of Portage river, western shore of Keweenaw bay	46 58 11	88 24 33	...	F. A. R. F.
628		Portage Range, front light	On prolongation of centre line of cut from Keweenaw bay	...	...	...	F. W.
629		Portage Range, rear light	...	...	...	...	F. W.
630		MANITOU	On the east point of Manitou island	47 25 12	87 35 38	...	F. V. W. F.
631		GULL ROCK	On a rocky islet between Keweenaw point and Manitou island.	47 25 02	87 40 11	...	F. R.
632		COPPER HARBOR	On the eastern point of the entrance to Copper Harbor, Mich.	47 28 34	87 52 00	A horn.	F. W.
633		Copper Harbor Range, front light.	On Fort Wilkins reserve	47 28 10	87 52 26	...	F. W.
634		Copper Harbor Range, rear light.	On Fort Wilkins reserve	47 28 05	87 52 26	...	F. W.
635		Eagle Harbor	On the west point of the entrance to Eagle Harbor, Mich.	47 28 50	88 04 04	...	F. V. W. F.

WISCONSIN AND MICHIGAN.

No.	Lat. N.	Long. W.	Description of light. (See page.)	Color of light.	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When built.	When rebuilt.	When relighted.	Compass range of visibility.	Remarks.
[illegible]	.....	15¼	F. W.	Red	70	76	[⊙ 3½]	1847	1861	1863	S. by W. by E'd to W.	Iron-pile structure, connected with keeper's frame dwelling, painted white. A guide to and from White-Fish bay, at the southeast extreme of Lake Superior. The southwest point of the shoal off Carlton island bears NW. ½ W., 5¾ miles; Manitou Island, W. NW. ½ W., 13½ miles; Montreal Island, (Canada,) N. by E. ½ E., 34 miles.
[illegible]			F. W				[illegible]					To be built. When the light bears due south, distant 1½ miles, steer W. by S. for Marquette, 60 miles; or SW. by W. for Grand Portal, 19 miles; or NE. 56¼ miles, to White Fish point. It is 27 miles from this light to Grand Island light. A reef extends in northwesterly direction a distance of three-fourths mile from the light.
[illegible]	[illegible]	[illegible]	F. A. W. F	Yellow	33	205	[⊙ 4]	1856	1867	.....	E. by N'd to W. SW.	Brick tower rising from keeper's dwelling, built of yellow brick. Stannard's Rock beacon, NW. by N. ½ N., 19½ miles; Manitou Island light, NW. ¾ N., 7½ miles. This course would pass 3¼ miles to the southward and westward of Stannard's Rock beacon. Granite Island light, W. NW. ½ W., 30 miles; Marquette light, W. ½ S., 33 miles; the southwest point of Michipicoten, N. NE. ½ E., 84 miles; Pointe au Sable, E. NE. ½ E., 27 miles.
[illegible]	[illegible]	12	F. W	White	30	34	[⊙ 5]	1868	.....	1869	NE. to E. NE.	Light on keeper's wooden dwelling. To guide through the eastern passage to the anchorage at Grand Island harbor. In entering the harbor from the eastward, pass Castle point on the main land within half a mile; then steer southwest for the light, which may be approached and passed within 200 yards.
[illegible]	[illegible]	10	F. W	White	19	23	[⊙ 6]	1868	.....	1870	N. to N. NW.	Front light in wooden tower; rear light on keeper's frame dwelling. These lights, 500 feet apart, are a guide for entering the west channel to the anchorage of Grand Island harbor. With the north point of Wood island, bearing W. seven-eighths of a mile, and the lights in range, steer S. by E. ½ E., 5 miles, toward the range lights. At this point a vessel should be about five-eighths of a mile north of the lights, and should have opened the two extreme south points of the island; then haul to the eastward for the respective anchorages, keeping Powel's point close aboard.
[illegible]	[illegible]	11	F. W	White	22	31	[⊙ 6]	1868	.....	1870		
[illegible]	[illegible]	15¼	F. W	Yellow	33	77	[⊙ 4]	1853	1866	1870	270°	Tower rises from keeper's dwelling, but of yellow brick. Stannard's Rock beacon, N. ¾ E., 13¼ miles; Grand Island light, E. ½ N., 31 miles.
[illegible]	1.30	16¼	F. V. R. F	Granite	34	93	[⊙ 4]	1868	.....	.....	Entire horizon	Tower rises from keeper's dwelling, built of granite. Keweenaw point, N. by W. ½ W., 48 miles; Traverse point, NW. ¾ W., 48 miles; Stannard's rock, N. by E. ½ E., 32 miles.
[illegible]	[illegible]	22	F. W	Granite	34	197	[⊙ 3½]	1868	.....	.....	Entire horizon	Tower rises from keeper's dwelling, built of granite. Stannard's rock, E. NE., 39 miles; Manitou Island light, N. NE. ¼ E., 37 miles; Traverse Island, NW. by W. ½ W., 14½ miles.
627	2.00	15	F. A. R. F	White	45	68	[⊙ 5]	1856	.....	.....	NE. by E'd to S. by W.	Manitou Island light, NE. ½ E., 40½ miles; Stannard's rock, E. NE. ¾ E., 58 miles.
[illegible]	[illegible]	10	F. W	White	19	21	[⊙ 6]	1868	.....	.....	.....	Stone and brick tower, connected with dwelling of red brick by a covered way. Marks approach to Portage river. Front light on wooden tower, rear light on keeper's frame dwelling. Guides into Portage river. Lights 500 feet apart.
[illegible]	.....	10¼	F. W	White	23	25	[⊙ 6]	1868				
30	1.30	16	F. V. W. F	White	70	81	[⊙ 3]	1849	1861	1867	Entire horizon, except from W. by N. by W'd to W. by S.	Iron-pile structure, connected by a covered way with keeper's house, of wood, painted white. Stannard's rock, SE. 23½ miles; southwest point of Michipicoten, E. NE. ½ E., 75 miles; the south point of State Islands, N. by E. ½ E., 83 miles; the Bateau rocks, N. by W. ¾ W., 54 miles; the east point of Isle Royal, NW. ½ N., 66 miles.
[illegible]	[illegible]	13¼	F. R	Yellow	39	50	[⊙ 4]	1867	.....	.....	Entire horizon, except from E. NE. to E. by S. ½ S.	Tower rises from keeper's dwelling, built of yellow brick. A guide through the passage between Gull rock (which lies near the western end of Manitou Island) and Keweenaw point.
[illegible]	[illegible]	14¼	F. W.	Yellow	36	65	[⊙ 4]	1848	1866	.....	E. ½ N. by W'd to W. ½ N.	Tower and keeper's dwelling connected, built of Milwaukee brick. Southwest point of Isle Royal, W. NW., 68 miles; Otter Head, (Canada,) NE. by E. ½ E., 92 miles; Passage Island, N. NW. ¼ W., 58 miles.
[illegible]	.....	10	F. W.	White	16	22	[⊙ 6]	1865	.....	.....	.....	To guide vessels into Copper Harbor. The front light is in a wooden tower, rear light on keeper's frame dwelling. Lights 500 feet apart.
[illegible]	.....	12	F. W.	White	26	39	[⊙ 6]	1865	.....	.....	.....	
[illegible]	[illegible]	14	F. V. W. F	Red	38	58	[⊙ 5]	1850	1871	.....	E. by N. by N'd to W.	Tower rises from the corner of the keeper's dwelling, built of red brick. The entrance to Les Petites Ecrits bay, (Canada,) N. NE. ½ E., 99 miles; the north point of the outer or easternmost of the Apostle group, W. by S. ½ S., 105 miles.

WISCONSIN AND MICHIGAN.

Number		Name.	Location.	Latitude north.	Longitude west.	Fog-signal.	Description of light (See page.)
				° ′ ″	° ′ ″		
636	LAKE SUPERIOR.	Eagle River	Near the entrance to Eagle river, south shore of Lake Superior.	47 25 03	88 18 07		F. W.
637		Ontonagon	At mouth of Ontonagon river, Michigan, on west side of entrance.	46 52 15	89 31 00		F. W.
638		Michigan Island	On the southwest point of Michigan island, the most southern and eastern of the Apostle group, Wis.				F. W
639		La Pointe	On Chequamegan point, the southeastern entrance to La Pointe harbor, and to the southward of Bayfield.				F. R.
640		Raspberry Island	On the southwest point of Raspberry Island, one of the Apostle group.				F. V. W. F
641		Minnesota Point	At the head of Lake Superior, mouth of St. Louis river, three-eighths of a mile northwest of the piers.	46 46 00	92 11 00		F. W.
642		Duluth	On the end of the south pier of Duluth				F. W.

WISCONSIN AND MICHIGAN.

Description of light (See page.)	Lat.	Long.	Color of tower	Height of tower from base to focal plane	Height of focal plane above sea level	Order of lens.	When built.	When rebuilt.	When relighted.	Compass range of visibility	Remarks
F. W.		14	Yellow	24	61	[⊙5]	1858			NE. by N'd to W. by S.	Light on keeper's dwelling. A guide to the pier. Sijkowit Island, N. NW. ¼ W., 44 miles; Michigan Island light, W. SW. ¼ W., 100 miles.
F. W.		13	Yellow	39	47	[⊙4]	1852	1866		NE. by N'd to W. by S.	Tower rises from keeper's dwelling, built of yellow brick. The southwest point of Isle Royal, N. ¼ E., 67 miles; Grand Portage bay, (Canada,) N. by W., 75 miles.
F. W		19	White	64	129	[⊙3½]	1857		1869	E. NE. by S'd to W. NW.	A stone tower, connected with a stone dwelling by a covered way. A guide through the passage between Madeline, Stockton, and Michigan Islands, to Bayfield and La Pointe. Ontonagon, E., 56 miles
F. R		12½	White	34	42	[⊙4]	1858			NE. by E. ¼ E. to SE. by E. ¼ E.	Light on keeper's frame dwelling, painted white. Black river, E. ¼ S., 35 miles; Eagle river, E. NE. ¼ E. 115 miles.
F. V W F		15½	White	37	77	[⊙5]	1862			E. NE. by S'd to N.	Light on keeper's frame dwelling, painted white. A guide between the Main and Raspberry Islands, and to Bayfield and La Pointe. Baptism river, NW. ¼ S., 30 miles.
F. W.		14½	White	45	50	[⊙5]	1857			E. SE. by N'd to N. NW.	Brick tower with brick dwelling attached. A guide into Superior bay. The southwest point of Isle Royal, NE. by E. ¼ E., 155 miles; Point Porphyry, (Canada,) NE. ¼ E., 192 miles.
F. W.			White			[⊙5]					Building. A wooden tower on the outer end of the south pier of the canal. Guide into the canal

Table of distances at which objects can be seen on the lakes, according to their respective elevations and the elevation of the eye of the observer.

Heights in feet.	Distances in statute miles.	Distances in nautical miles.	Heights in feet.	Distances in statute miles.	Distances in nautical miles.	Heights in feet.	Distances in statute miles.	Distances in nautical miles.
5	2.958	2.565	70	11.067	9.598	250	20.916	18.14
10	4.184	3.628	75	11.456	9.935	300	22.912	19.87
15	5.123	4.443	80	11.832	10.26	350	24.748	21.46
20	5.916	5.130	85	12.196	10.57	400	26.457	22.94
25	6.614	5.736	90	12.549	10.88	450	28.062	24.33
30	7.245	6.283	95	12.893	11.18	500	29.580	25.65
35	7.826	6.787	100	13.228	11.47	550	31.024	26.90
40	8.366	7.255	110	13.874	12.03	600	32.403	28.10
45	8.874	7.696	120	14.490	12.56	650	33.726	29.25
50	9.354	8.112	130	15.083	13.08	700	35.000	30.28
55	9.811	8.509	140	15.652	13.57	800	37.416	32.45
60	10.246	8.886	150	16.201	14.05	900	39.836	34.54
65	10.665	9.249	200	18.708	16.22	1,000	41.833	36.28

If the distance at which a light of a given height can be seen by a person on a given level be required, it is only needful to add together the two numbers in the column of distances corresponding to those in the column of heights, which represent, respectively, the height of the observer's eye and the height of the focal plane above the sea. When the height required to render a light visible at a given distance is required, we must first seek for the number corresponding to the height of the observer's eye, and deduct this from the whole proposed range of the light, and opposite the remainder in the column of distances, seek for the corresponding number in the column of heights.

Distances corresponding to heights not included in the above table may be found by the formula $d = \sqrt{\frac{3}{2} H}$, in which d is the distance in statute miles, and H is the height, in feet, of the focal plane above the lake. One statute mile = 0.867 of a nautical mile.

EXAMPLE 1.—Detour light 75 feet high, visible	11.456	statute	miles.
Add for height of observer's eye on deck 10 feet =	4.184	"	"
Distance of light	15.640	"	"
EXAMPLE 2.—Presque Isle light 128 feet high, visible	14.907	"	"
Add for height of observer's eye on deck 10 feet =	4.184	"	"
Distance of light	19.111	"	"

CANADIAN LIGHTS ON THE LAKES.

ST. LAWRENCE RIVER.

Number.	Name of Light.	Place.	Latitude N.	Longitude W.	Number of Lights and colour of Lights.	Number of Fog Bells.
99	Crane Island	One and a half miles from west point of island	47 00 00	70 32 00	1	F
101	Belle Chasse	East point of island	46 56 00	70 46 00	1	1
102	St. Lawrence Point	Orleans Island	46 50 00	71 00 00	1	1
105	St. Antoine	South shore	46 39 43	71 30 40	1	F
105	St. Croix	On shore, near high-water mark, and [illegible]	46 37 45	71 41 40	1	F
107	Port Neuf	On north [illegible] mile off the river	1 41 1[illegible] N. [illegible]	1 [illegible] 40	SW. [illegible] NE. [illegible]	1
109	Platon Point	On south side, 14 miles below Riche[illegible]	46 30 1[illegible] N. [illegible]	71 [illegible]	W. [illegible]	1
111	Richelieu	Centre of island	46 30 24	71 54 1[illegible]	1	F
113	Lamoraie Point	On south shore, half a mile below Great [illegible]	46 35 05	71 50 35	1	F
115	Cape Charles	On the cape	46 33 30	72 01 1[illegible]	W. NW. [illegible]	1
117	Grondine	North shore	46 35 40	72 01 12	SW. [illegible] W. [illegible]	F
119	St. Pierre des Becquets	South shore, summit of St. Pierre point	46 30 28	72 1[illegible] [illegible]	1	F
121	Batiscan	North shore, 14 miles below Batiscan [illegible]	46 30 16	72 14 [illegible]	W. [illegible]	F
123	Champlain	North shore, near Champlain church	46 26 34	7[illegible] [illegible]	1	F
125	Cape Madeleine	Lower lights, north shore, 3 miles below the cape	46 23 16	72 27 1[illegible]	SW. by W. ¼ W. [illegible]	F
127		Upper lights, north shore, 2 miles below [illegible]	4[illegible] W. [illegible]	7[illegible]	W. [illegible]	1
129	St. Francis Port	South shore, high light on a pier	46 16 20 W. [illegible]	72 37 1[illegible]	W. by S. ¼ S. [illegible]	F
131	Point du Lac	North shore	46 1[illegible] 50	72 40 [illegible]	1	F
133	East	Light-vessel in lake	4[illegible] 1	[illegible] 1	1	F
135	Centre	Light-vessel, S. SE., 21 miles from Rivière du Loup	46 11 39	72 53 30	1	F
137	Western	Light-vessel, north side of channel, NE. by N., 3 miles from Flat Island	46 09 34	72 56 50	1	1
139	Isle aux Raisins	On the island	46 06 14	7[illegible] 57 50	1	1
141		South part of island	46 06 00	72 58 00	1	1
143	Stone or Isle à la Pierre	East part of island	46 05 54	72 59 1[illegible]	1	1
145	La Valtrie	South [illegible] island	1 [illegible] N. [illegible]	[illegible] 1 [illegible]	[illegible]	1
147	Traverse	Two and a half miles above Contrecœur	1 1[illegible] N. [illegible]	[illegible] 1 [illegible]	SW. by [illegible] S. [illegible]	1
149	Isle aux Prunes	Opposite Verchères	45 4[illegible]	[illegible]	1	1
151	Repentigny	Three-quarters of a mile below Repentigny.	45 4[illegible] N. [illegible]	[illegible]	S. SW. [illegible]	F
153	Isle à la Hague	On the islet	45 44 14	7[illegible]	1	1
155	St. Therese	On the island	45 41 22 N. [illegible]	73 27 10	SW. [illegible] W. [illegible]	1
157	Point aux Trembles	North shore	4[illegible] [illegible]	7[illegible]	SW. [illegible]	F
159	Montreal	On Island wharf	45 30 22	73 33 11	SW. ¼ S. [illegible]	F. B
161	Lachine	On pier at entrance of canal, north shore.	45 27 00	73 41 00	1	F...

All bearings are magnetic.

ST. LAWRENCE RIVER.

			Color or any peculiarity of light house	Height of tower in feet	Height of focal plane above water	Year built	Remarks
		10	Wood	11	17	18[illegible]	Variation in 1870, 15° [illegible] W
		11	Wood	70	0	18[illegible]	
		8	White	18		1869	
		10	Wood, white	26		1858	Variation in 1870, 15° 55' W
		4	Wood, white	20	20	1842	A small light, to assist in keeping the channel for some distance, up and down the river.
		4	Both stone and white, the lower lantern is on roof of house	200 120		1842	These lights in one lead up Richelieu channel to the light on Richelieu Island
		12	Wood, octagonal, white	12 10	24 7	1840	These lights lead up the Richelieu. Variation in 1870, 15° 30' W
		7	Octagonal, stone	27		1840	This light and the lights on Platon point are very nearly in the same line of bearing, namely, E. by N. ¼ N
		5	Wood	35	8	1844	To show off Batture des Grondines and to avoid Batture Cordin, and as a steering point for Richelieu
		4	Wood	110	20	1856	Lead to and from Cap à la Roche and Cape Charles, and to answer as a steering point through Richelieu
	1 each	Octagonal, wood, white	50 27	30	1857	To lead off Cap à la Roche to Levrard.
		5	Octagonal, wood, white	85	12	1844	To indicate the widest berth of Cap à la Roche. Variation in 1870, 14° 10' W
	1	4	Octagonal, wood, white	30 30	31 11	1844	To lead through Levrard and clear Batture St. Ann on the south, and Pouillier on the north
		4	Octagonal, wood, white	30	10	1844	Steering point for lower part of bay of Champlain.
		4	Octagonal, wood, white	53 73	13 10	1843	To clear Batture Bigot. Variation in 1870, 14° 20' W
		8	Octagonal, wood, white	55 75	30 10	1843	To clear Pouillier Provenche
	1 each			31 12	21 4	1839	These lights in one with the eastern light-vessel on lake lead up through the dredged channel, W. by S. ¼ S. High light removed in winter.
		12		71	24	1843	Shows the turn of channel at Point du Lac
		8	Red	15	8		Removed at the approach of winter, on account of ice. On south side of Petite Traverse, off Rivière du Loup.
		6	Red	15	8	1816	Removed at the approach of winter, on account of ice. To indicate the turn of the channel and lead to No. 2.
		6	Red	15	8	1828	In connection with Isle à la Pierre, and bearing in line with No. 1, and to avoid Battures St. François and à la Carpe. Variation in 1870, 12° 55' W.
		6	Red	30	29	1843	To lead from entrance of the Batture of Lake St. Peter to No. 1 light-vessel, up and down.
111		6	Red			1863	
112		6	Red	30			Indicates entrance to channel, and leads to No. 1
113		7	Red	21 13	17 9	1834	Leads to channel called Flat Islands.
117			Wood, white, square			1858	To lead into La Valtrie channel and Isle Bouchard, and indicates the new channel to be kept in line till La Valtrie lights are brought to bear.
118			Octagonal, wood, white			1866	To clear the island.
		4	Wood, white	30 14	26 14	1843	To lead through Isle à le Bague channel, and to avoid Pouillier on the north and shoal on the south.
		4	Wood, white, octagonal	24		1861	The island is extremely low. Removed in winter on account of ice.
		4	Wood, white, square				Leads to entrance through Vercheres channel, up and down the river. Variation in 1870, 12° 30' W.
122		6 4	High and low octagonal wood, white.	53 25		1846	To lead through the channel between Point aux Trembles and Varennes up to Longue point.
	1 each		Wood, octagonal	38 20	31 21	1830	Red lights. Indicate the deepest channel to and from the harbor.
		6	Square, wood, white	24	17	1849	Variation in 1870, 11° 25' W.

ST. LAWRENCE RIVER.

Number	Name of light.	Place.	Latitude north.	Longitude west.	Number of lights and relative positions		Fixed or Revolving, Red or White, or Red and White
164	Lake St. Louis	Light-vessel, four-fifths miles above Lachine	45 29 30	73 42 10	1		F
165		Light-vessel, 2¼ miles above Lachine	45 25 40	73 44 15	1		F
167	Wade Shoal	North side of Ottawa river	45 [illegible] 00	75 37 00	1		F
169	Claire Point	Light-vessel, south side of channel, 64 chains above Deval from light No. 3 on St. Lawrence river, near Claire point	45 24 30	73 45 30	1		F
171	Range Channels	On shoal, north side of channel, about 14 miles below Point Claire 7.50 chains westerly from light-ship near Point Claire	45 20 00	70 40 10	1		F
173	Green Shoal	On pier, south side of channel, 7 miles below Ottawa city			1		F
174	Point L'Original	Point Original	45 46 00	74 46 15	1		F
174½	McTravis Point		45 50 00	74 52 30	1		F
175	Chateauguay	Light-vessel, 4¼ miles above Lachine	45 24 00	73 40 18	1		F
177	Beauharnois	Lower entrance of canal, south shore	45 10 00	73 54 00	2	NE by E ¼ E, 414 yards apart	F
179	Grosse Point	Upper entrance of Beauharnois canal	45 15 35	74 00 25	2		F
181	Off Grosse Point	On piers in river			2		F

ST. FRANCIS LAKE.

185	McGee's Point	North shore	45 12 25	74 10 10	1		F
187	Cherry Island	South side of north channel	45 00 00	74 22 00	1		F
189	Cherry	Light-vessel, above island	45 08 20	74 25 40	1		F
191	Crib	North side of channel, on a pier 4 miles southwest from Lancaster village	45 07 00	74 30 00	1		F
193	Cornwall Canal		45 01 15	74 55 25	1		F

BETWEEN ST. FRANCIS AND ONTARIO LAKES.

195	Cole's Shoal	On pier, 5 miles west of Brockville, three-quarters of a mile from north shore			1		F
197	Grenadier Island	Southwest point of island, north side of channel, 2 miles below Rockport.			1		F
199	Lyndock Island	Northwest point of island, south side of channel, 5 miles west of Rockport.			1		F
201	Gananoque Narrows	Northeast end of Little Stave Island, south side of channel, 5 miles below Gananoque			1		F
203	Jack Straw Shoal	On a pier, north side of channel, 3 miles below Gananoque			1		F
[illegible]	[illegible] Shoal	On pier, north side of channel, 2 miles west of Gananoque.	44 16 00	76 22 30	1		F
207	Red Horse Rock	On pier, southeast side of channel, one-half mile west of No. 203			1		F
209	Burnt Island	Southeast point of island, north side of channel, three-quarters of a mile from No. 205.			1		F
211	Wolfe Island	Northeast entrance point of island, 18 miles southeast of Kingston.	44 14 00	76 10 00	1		F

ST. LAWRENCE RIVER.

			Color or any peculiarity of light house					Remarks
		6	Circular iron, red	30		1849		
		6	Red	30				Light vessels painted red, with white tower and red lantern
		8	Wooden tower hexagonal	45		1856		Two sides next to river, white, the others brown
		6	Iron	34	17			
		7	Wood	29	2			
		9	Wood	46	17			
		6	Hexagonal white	45	40	1854		
		6	Hexagonal wood	45	25	1856		
		6	Red	30		1849		Hull red, tower white, red lantern.
		10	Wood, square, frames white			1850		Incines, lead to Chateauguay light. Variation in 1870, 11° W.
		8	Square, wood, one red and one white	20	20	1844, 1850		To be kept in one when leaving the canal, till the upper lights come in one.
		4	Square, wood, one red and one white			1850		

ST. FRANCIS LAKE.

		10	Square, wood, white	40	24			Midway between Cotton and Cherry islands.
		10	Square, wood, white	40	40	1842		
						1849		Opposite the light there is a beacon, north of the channel
		8	Square, wood, white	20	20	1844		
						1850		Variation in 1870, 8° 40' W

BETWEEN ST. FRANCIS AND ONTARIO LAKES.

		6	White, square, wood	13	31	1856		
		10	White, square, wood	9	17	1856		
		7	White, square, wood	10	26	1856		
		7	White, square, wood	11	17	1856		
		6	White, square, wood	11	29	1856		These small lights are for the purpose of marking out the channel through the Thousand Islands, between Brockville and Kingston. Variation in 1870, 7° 15' W.
			White, square, wood	28	26	1856		
			White, square, wood	28	26	1856		
			White, square, wood	24	2	1856		
			White, square, wood			1856		

LAKE ONTARIO.

Number	Name of Light	Place	Latitude North	Longitude West	Number of lights and colour of lights	Height of tower above water
213	Kingston	West end of pier, Kingston	44 13 00	76 29 00	1	1
215	Snake Island	On point of rock off north side of Snake Island, Lake of Bay of Quinte	44 11 30	76 42 00	1	1
217	Galloo Island	North end of island, Galloo Island, Lake of Bay of Quinte	44 09 00	76 46 00	1	1
219	Pigeon Island	North end of island	44 04 00	76 49 00	1	Revolving
219	Point Dume	East point of island	44 3 00	76 49 00	1	1
221	Pleasant Point	Brockville, Lake of the Thousand Isles	44 35 00	75 39 00	1	1
223	Telegraph Island	River St. Lawrence	44 35 30	75 40 15	1	1
225	Peter Point	Off point	44 34 00	75 38 00	1	Revolving
227	Milburn Point	Wharf, Gananoque, N. side of Point	44 20 00	76 10 15	1	1
229	Mouth Bonnet or Bell Island	On north end of Bell Island, Lake Ontario, N.E. side of island	44 14 00	76 36 00	1	1
231	Prescott Pier	East pier	44 41 00	75 31 00	1	1
233		On pier, Prescott	44 40 00	75 32 00	2	W. SW. and E. NE. lights
235	Fox Island	Lake shore	44 19 00	77 28 00	1	1
237	Cobourg	Pier head	43 57 00	78 09 00	1	1
239	Peter Robinson Point, Island	W. side, Rideau Canal, Ottawa	45 25 30	75 45 00	1	1
241	Port Hope	Pier head, east side	43 56 15	78 18 00	1	1
243	Darlington	Pier head	43 52 00	78 43 45	1	1
245	Oshawa Port	Pier head	43 52 00	78 51 00	1	1
247	Whitby Harbour	West pier	43 51 00	78 55 00	1	1
249	Pickering or Liverpool	East pier head	43 48 15	79 09 00	1	1
251	Toronto	Gibraltar point, south end of island, 10 miles south of Toronto	43 37 00	79 23 30	1	1
253		Opposite school house, western part of the island, in front of Toronto	43 38 30	79 23 15	1	1
255	Credit Port	On pier	43 31 30	79 40 00	1	1
257	Oakville	Pier head	43 31 45	79 40 00	1	1
259	Burlington Bay	South pier of entrance	43 18 00	79 48 00	1	
261	Dundas or Hamilton	East pier head	43 15 30	79 53 00	1	Revolving

LAKE ERIE.

263	Colborne Port and Range Light	West pier head	42 51 30	79 17 00	1	1
265	Moravia Island	On an island between Colborne and Maitland ports, 1 mile S. of head of main land	42 49 30	79 1 00	1	Revolving
267	Maitland Port	West pier	42 45 00	78 5 00	1	1
269	Dover Port	West pier	42 42 30	80 12 00	1	1
267	Long Point or North Foreland	East extremity	42 34 30	80 0 00	1	1
269	Big Otter Creek or Port Burwell Port	Three hundred and thirty-three yards in front	42 3 00	80 46 30	1	1
271	Catfish Creek or Port Bruce Port	On pier	42 10 00	81 0 00	1	1
273	Port Stanley Port	Extremity of West pier	42 10 00	81 12 30	1	1
275	Pelee Island	North end point	41 46 00	82 37 45	1	1
277	Pelee Spit	On Gaisson 24 miles S. southerly from extreme end of point from north shore	41 42 30	82 29 45	1	1

LAKE ONTARIO

LAKE ERIE.

1[illegible]	Wood, white	58 11	[illegible] 10	18[illegible]	Entrance to Welland canal
1[illegible]	Round, stone, white	[illegible]	[illegible]	18[illegible]	Variation in 18[illegible] to W
1[illegible]	Square, wood, white			1848	Grand river entrance. Rebuilt 1871
8	Square, wood, white	[illegible]	20	18[illegible]	
[illegible]	Octagon, wood, white	[illegible]	[illegible]	18[illegible]	Variation in 1870 [illegible] W
1[illegible]	Octagon, wood, white	90	[illegible]	1840	
4	Lantern	[illegible]		1841	
9	Round, stone	[illegible]	[illegible]	18[illegible]	W. by N. clears Pelee shoal. Variation in 1870 [illegible] 45' E
20		[illegible]	[illegible]	1861	

DETROIT RIVER.

Number.	Name of light.	Place.	Latitude north.	Longitude west.	Number of lights and relative positions.		Fixed, flashing, fix and flash int., alt., revolving.
			° ′ ″	° ′ ″			
279	AMHERSTBURG	Bois Blanc Island, south point	42 05 00	83 06 36	1		F

LAKE ST. CLAIR.

281	THAMES RIVER	Mouth of river, south shore	42 18 00	82 25 00	2	SE. by S. ¼ S. and NW. by N. ¼ N., 450 yards apart.	F

LAKE HURON.

283	GODERICH	On high bank, south of entrance to harbor. Two on north pier.	43 44 33	81 41 00	3		F
285	CLARK POINT	North shore, about 20 miles northeast from Goderich.	44 04 10	81 43 42	1		Flg.
287	CHANTRY ISLAND	South side, about 2½ miles west from Saugeen.	44 29 40	81 23 20	1		F.
289	GEORGIAN BAY. Isle of Coves	Northeast point of island, entrance to Georgian bay.	45 19 40	81 44 00	1		Rev'g.
291	Griffith Island	Northeast end of island, 20 miles from Owen sound.	44 51 00	80 53 00	1		F
293	Nottawasaga Island	About 4 miles northwest from Collingwood.	44 32 30	80 15 00	1		Rev'g.
295	Collingwood	Breakwater pier	44 31 00	80 12 35	1		F. R.
297	Christian Island	Southeast part of island, 1½ miles from main land.	44 47 00	80 08 00	1		F
299	Mink Island	Entrance to Parry sound	45 22 00	80 12 45	1		F
301	Lonely Island		45 33 30	81 28 00	1		F
303	Red Rock	One mile east of Killarney, on Red Rock point.	45 57 00	81 26 00	2		F
305	Partridge Island	One and a half miles northwest of Red Rock light	45 58 00	81 29 00	2		F
307	Range Lights	Shaftsbury, or Little Current	45 58 00	81 54 00	2		F.
309	Clapperton Island	North point	46 03 00	82 19 00	1		F
311	Sulphur Island	Southeast side	46 00 00	83 36 00	1		F

LAKE SUPERIOR.

313	ST. IGNACE	Three miles from St. Ignace island	48 42 00	*88 10 00	3		F

* Longitude of St. Ignace light-house, by Bayfield's chart, 88° 10′ 30″ west.

DETROIT RIVER.

Number.	Interval of revolution or flash.	Miles seen in clear weather.	Color or any peculiarity of light-house.	Height, in feet, centre of lantern, above high water.	Height, in feet, of building from base to vane.	Year lighted.	Character, and order of illuminating apparatus.	Remarks.
279	.....	18	Round, stone.....	56	40	1837	.....	

LAKE ST. CLAIR.

281	.....	12 6	Square, wood..... Stone, round tower.....	34 15	30 15	1837 1845	.....	The two lights in one lead over the bar.

LAKE HURON.

283	.....	25	Square tower, white.....	150	20	1847	C.....	Variation in 1870, 0° 50′ W.
285	Half minute.	15	.....	87	87	1859	D., 2d ord.....	
287	.....	15	.....	86	86	1859	D., 2d ord.....	
289	Every 3 minutes; interval of light, 1½ minutes.	15	.....	90	85	1859	D., 2d ord.....	Variation in 1870, 0° 50′ W.
291	.....	12	.....	130	85	1859	D., 3d ord.....	
293	Half minute.	10	.....	86	85	1859	D., 2d ord.....	
295	.....	6	.....	24	.....	1858	.....	Red light. Variation in 1869, 2° 20′ W.
297	.....	8	.....	61	60	1859	D., 4th ord...	
299	.....	16	Square wooden tower, on keeper's dwelling.	56	40	1870	.....	Painted white. Visible from all points of approach.
301	.....	20	Square tower on white dwelling.	105	42	1870	C.....	
303	.....	10	.....	80	20	1866	C., 3d ord.....	At north side of channel leading into Killarney harbor.
305	.....	5	.....	30	20	1866	C., 3d ord.....	
307	.....	6	.....	24	.....	1866	C., 3d ord.....	
309	.....	8	.....	35	.....	1866	C., 3d ord.....	
311	.....	.....	.....	.....	.....	.....	C.....	

LAKE SUPERIOR.

313	Three lanterns, but show as 1 light.	8	.....	.....	.....	1866	C., 3d ord.....	Position by Bayfield's chart.

The foregoing list of English lights on the lakes, &c., corrected to January, 1873.

TREASURY DEPARTMENT, OFFICE LIGHT-HOUSE BOARD,
Washington City, January, 1873.

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